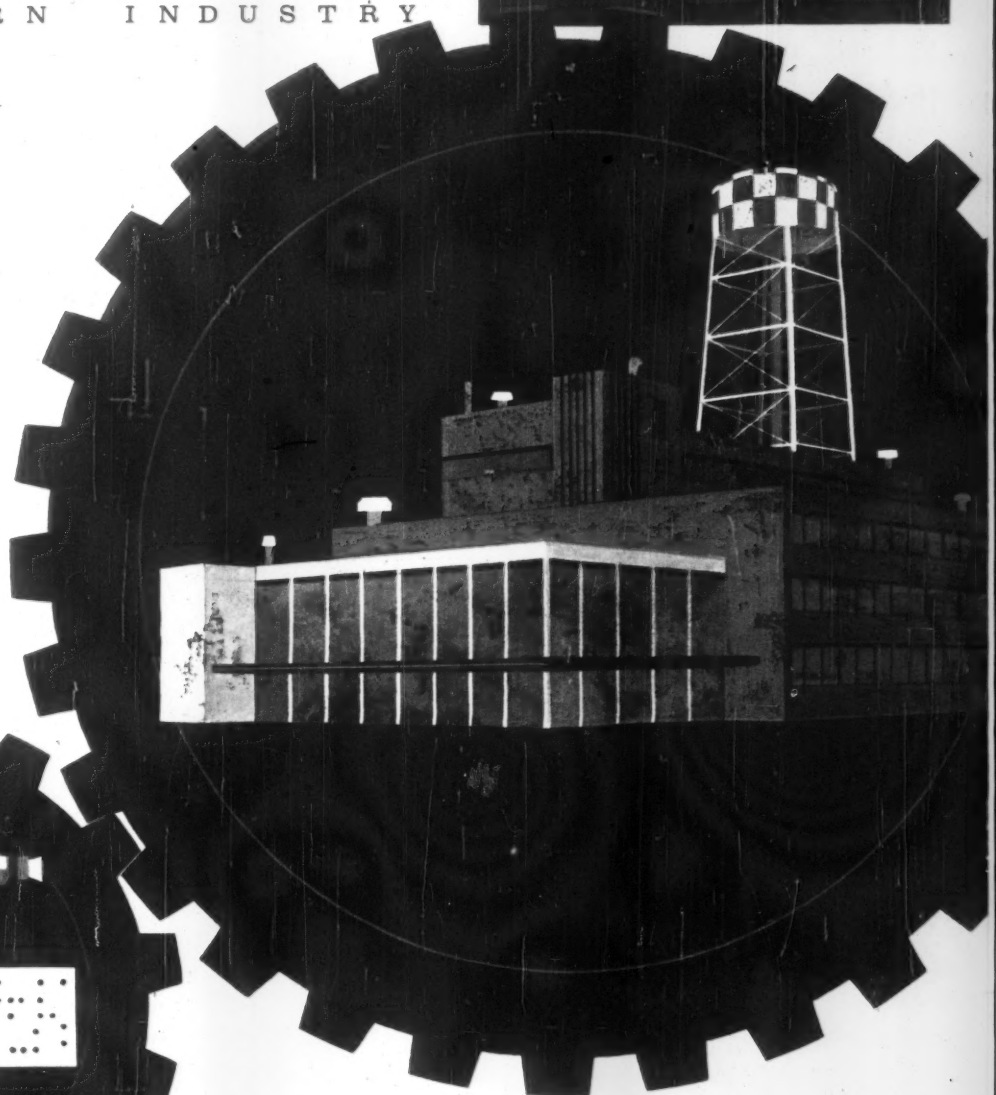
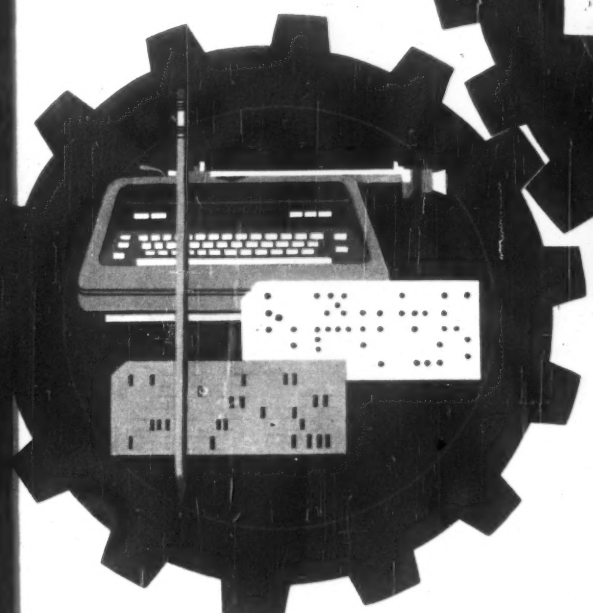
February 1960 75¢

DUN'S REVIEW
AND MODERN INDUSTRY

- MYTH OF THE ORGANIZATION CHART
- HOW TO PICK BETTER SUPERVISORS
- NEW WAYS TO SPEED DELIVERIES



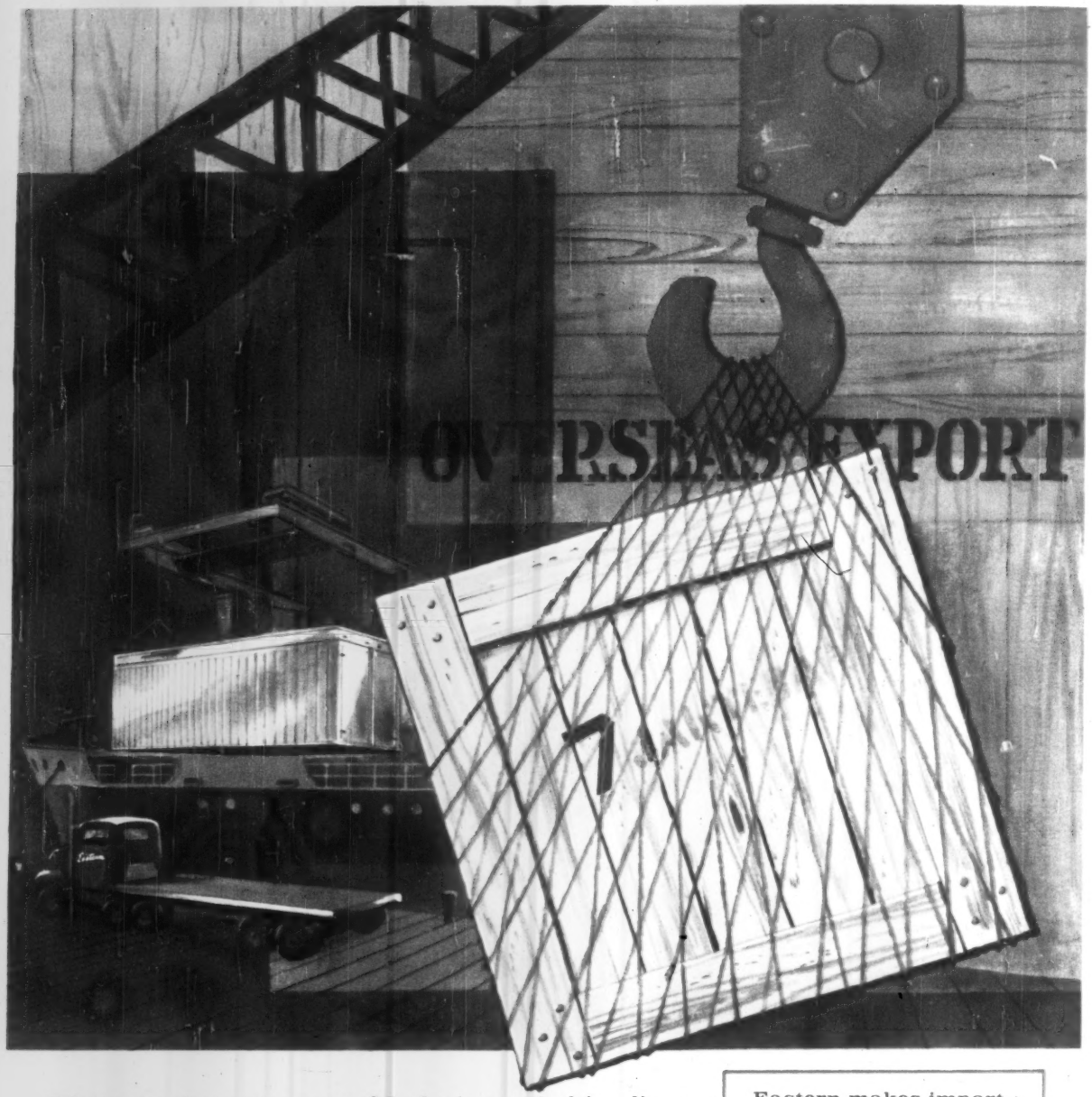


Crisis of the Cities

Industry Heads for the Open

A DUN & BRADSTREET PUBLICATION

CLOSING THE DISTANCE BETWEEN MATERIALS AND MARKET . . . THE MODERN MOTOR CARRIER: FOREIGN TRADE



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AND MODERN INDUSTRY

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EDITORIAL

Seed Money and Taxes

It's a foolish farmer who eats his seed corn in winter, and a short-sighted government that devours the seed money of industry by confiscatory tax rates. The seed money of industry is urgently needed for the increased cultivation of the profits which create tax revenues.

Industry has a growing assignment to feed, clothe, shelter, and transport a population which will reach 200 million in 1967. To perform this job, industry needs tools, plant facilities, and raw materials, and it requires capital beyond its capacity to save after taxes and beyond the apparent loaning capacity of banks and other sources of risk money.

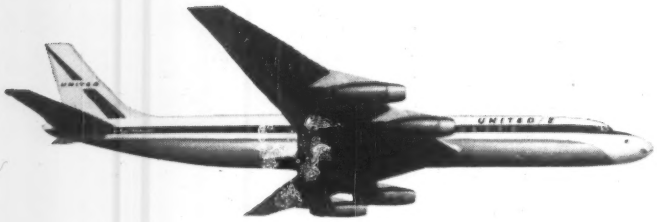
Congress is considering a group of new tax bills, reflecting a variety of opinions, influences, and prejudices. Any tax legislation calling for lower and more equitable rates has to be related to the budgetary demands of the national Government. On balance, those demands should be lowered, eliminating the grab-bag items which pour billions in tax money into subsidies and a host of social, educational, and economic projects that should be handled on a state, community, or personal basis. Further cuts in tax rates would be possible if the laws were enforced more effectively, spotlighting areas of potential revenue that now escape the collector.

The primary reason for taxes is to provide funds for the efficient operation of the Government in serving the needs of its citizens at home and protecting their welfare with an adequate and alert military force. No corporation or individual can object to this basic premise, heavy as the burden may be, but everyone has a right to demand equal treatment under the law.

The approach to current tax legislation should be free of class prejudice and should begin with an impartial study of the Government's revenue requirements and the income potentials from all sources. By reducing tax rates on corporations as well as individuals, the Congress will not only help industry to save money for expansion, but will invite money into savings institutions and create funds for equity capital from small investors. The lowering of the tax rate will actually generate more tax potential in added incentive and added income for the entire populace.

The industrial health of the United States is too important to have its future dictated by the present vagaries of the income tax law or damaged further by the antipathies of class-conscious tax philosophers with malice aforethought toward business. Nor can we permit tax opportunism to twist management thinking into financial pretzels.

Whether Congress adds some fancy swatches to the present patched-up income tax law or reworks it entirely to a sensible design of honesty and clarity, some revision is necessary if we are to provide adequate mobile credit for the economy to expand and prosper.



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The Trend of BUSINESS

Production: *Steel settlement assures steady gains*

Sales: *Retailers to top 1959 record*

Inventories: *Upward trend to level off at mid-year*

Failures: *1959 toll second highest on record (page 15)*

1960 opened with a strong upward movement in business activity that set the stage for further gains in the coming months. Increased spending by consumers and business men will mean steady advances in industrial production, employment levels, and personal income. This expansion to new high ground will be accompanied by slight but steady price increases.

As in recent months, the downward drift in new housing will be the prime soft spot in the business picture. Some business men are also concerned over the possible effect of tighter money on expansion.

The coming months will bring new records in total industrial production.

The settlement of the steel strike has assured marked gains in steel output as well as in the production of automobiles and other steel-related products. This, along with more moderate increases in most other industries, will mean new monthly records in the Federal Reserve Board's index of industrial production through late spring or early summer, after which a leveling out is likely.

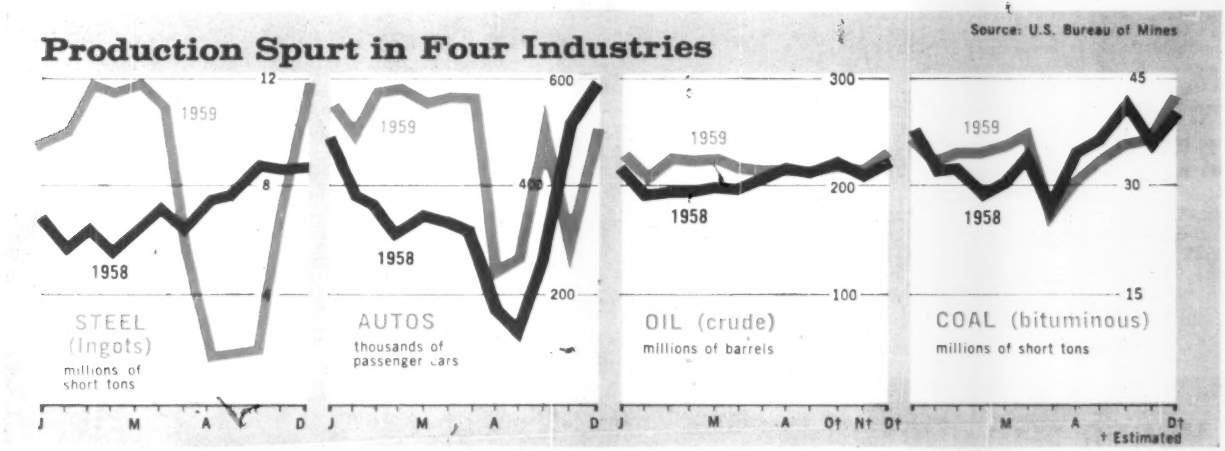
The new revised seasonally adjusted index (which includes utilities output and an upward revision of production in manufacturing and mining) will reach a peak of about 180 (1947-49) in June or July and then stay close to that level or dip fractionally during the rest of the year. This 1960 high point would be about 8 per cent higher than the 1959 high point of 166, which occurred in June just before the steel strike. On the old basis, the June 1959 peak was 155, and the 1960 peak is likely to be about 168.

A new record in steel output is likely this year.

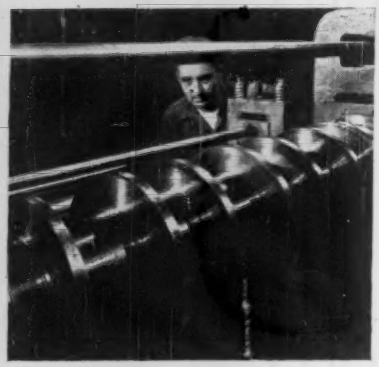
Although steel output in December and January was at record levels, steel inventories in the hands of users were at one of the lowest points since World War II. This will hold new orders for steel at extremely high levels in the next few months, and thereafter the extent of any decline will depend on sales in automobile, construction, appliance, machinery, and other steel-using industries.

Although the 1959 increase in steelmaking capacity was the smallest of the thirteen consecutive increases since 1946, it will enable the mills to accommodate the expected high levels of new orders and make 1960 a record year in steel output. The previous record was set in 1955.

The new labor agreement in the steel industry provides for the first wage increases after December 1 of this year, and steel makers are likely to raise their prices shortly thereafter. However, competition from abroad may make them a little cautious in doing so. For the second year



IN LATE 1959 *and early 1960, the economy was strengthened by output gains in steel, autos, oil, and coal. Sources: American Iron and Steel Institute; Automotive News; American Petroleum Institute; United States Bureau of Mines.*



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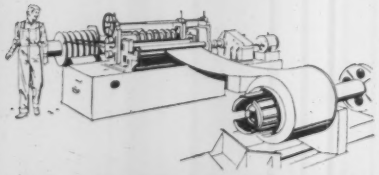

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in a row, and only the second year in history, U.S. steel imports are likely to exceed exports.

A recent upsurge in dealers' sales makes a record output of autos probable this quarter.

Auto makers have revised upwards their production schedules for the first quarter to close to 2.2 million cars, which would be the highest three-month total on record. Later this year, sales will probably level out, and thus production schedules will slip from the current extremely high levels. However, 1960 may well be a 7 million auto year, second only to 1955, when sales were 7.2 million.

Marked month-to-month increases will occur in the output of appliances, furniture, machinery, and other durable goods, and year-to-year gains will be substantial. Although increases in the output of apparel, textiles, food products, and other soft goods may not be so noticeable in the coming months as those in durables, appreciable increases over last year will be maintained.

As manufacturing output climbs, gains over a year earlier will widen in electric power production and in coal mining. The petroleum industry has heavy stocks on hand, and increases here will be minor.

Capital spending will surpass year-earlier levels.

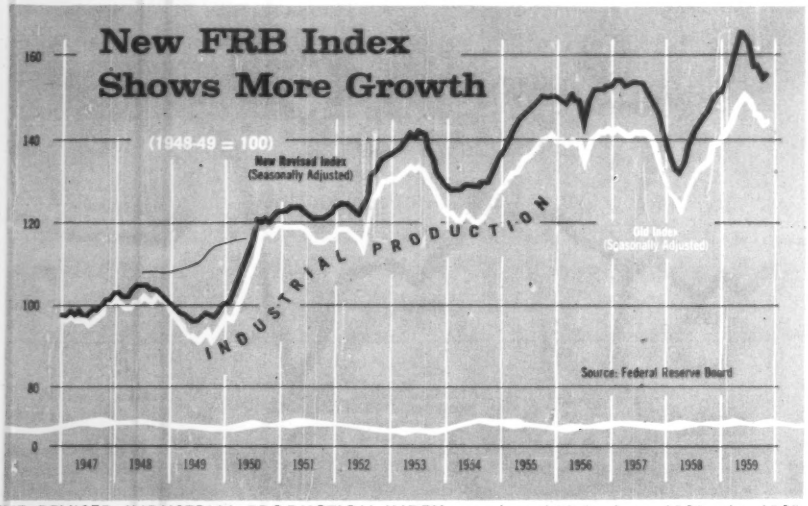
As production keeps climbing in the coming months, business men will more and more feel the need for expanding their production facilities. Plans for spending on new plant and equipment will be revised upwards, pushing the level for 1960 as a whole to nearly 10 per cent over 1959, which showed a 7 per cent gain over the previous year. The 1960 total, however, will not be as great as the record set in 1957. Marked gains will also occur this year in spending on research and development.

Corporate profits during the first half of the year will be at a new peak, but a decline is in prospect afterwards, as operating expenses and labor costs move up and over-all business activity loses some of its verve.

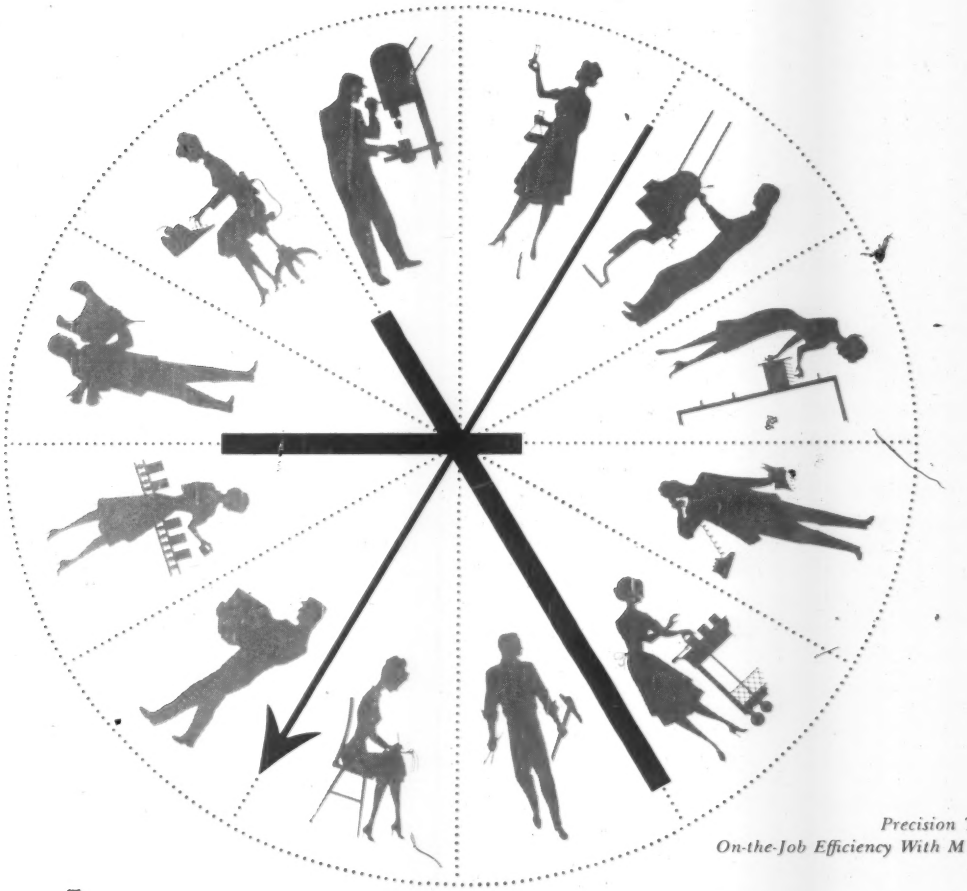
The rise in industrial output will bring the number of employed to record levels through mid-year. The outlook for unemployment, however, is not quite so rosy. The number of jobless as a percentage of the labor force will decline gradually, but it probably will not dip to 4 per cent, the level generally accepted as constituting "full employment."

Inventory accumulation will continue at a steady pace in the coming months.

As in the first half of 1959, when steel users anticipated the steel strike, the most noticeable gains in inventories will occur in steel and steel products. The rate of increase, however, during the current half is not likely to be so noticeable as it was a year ago. After mid-year, when supplies in the steel and steel-related industries are considered adequate, the over-all pace of inventory build-up will level off, and by year-end there may even be signs of a reversal. Later



THE REVISED INDUSTRIAL PRODUCTION INDEX *stood at 166 in June 1959, the 1959 peak, compared with 155 on the old basis. This is a 7 per cent gain over the old index.*



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EDITORIAL CHECKLIST

Features of importance coming in DUN'S REVIEW

✓ **Industry Builds for Tomorrow**

To meet the demands of expanding markets and new technology, industry is being forced to develop new solutions to plant location, planning, and construction problems. In the March issue, a 30-page Special Report to Management will pinpoint today's most effective company approaches to tomorrow's plant problems.

✓ **Pruning away Executive Deadwood**

Plenty of companies prefer to close their eyes to the all-too-common problem of the executive who can't pull his weight. Results: costly low management morale, high errors, organizational friction. Here's how some managements are facing up to the problem.

✓ **Advertising and the Company President**

Does the chief executive, as some say, meddle too much in advertising for the company's good? A new Presidents' Panel survey comes up with some surprising, straight-from-the-shoulder answers.

✓ **The Folklore of Management**

In the third of an exclusive series on management myths, business philosopher Clarence B. Randall dissects the common fallacy that business and politics won't mix, shows how we could all profit from more political-mindedness among business men.

✓ **Premiums on the Upswing**

More companies are discovering the virtues of a tested marketing device that can do wonders in breaking down certain sales roadblocks. Here's how you may be able to put premiums to work for you.

✓ **Business Men Look Ahead**

An exclusive survey of 1,500 representative business men across the nation assesses their sales and profit expectations for the coming months.

✓ **Living with the Law**

Top business lawyer Paul A. King brings DUN'S REVIEW readers fresh insights into new legislation, rulings, and court decisions that affect business operation.

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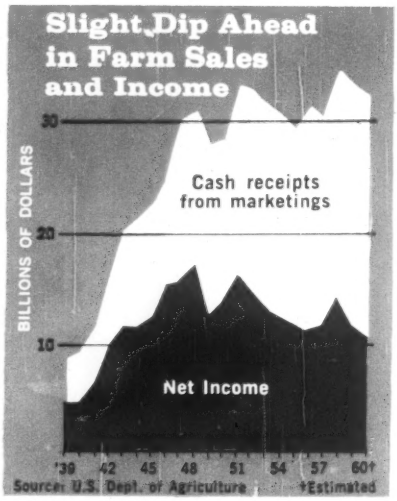
The "Compass Points of Business" feature which appeared each February and August in DUN'S REVIEW has been discontinued. Data that were included in the "Compass Points" may be obtained by writing to John W. Riday, Business Economics Department, DUN & BRADSTREET, INC., 99 Church St., New York 8.

in the year, the ratio of stocks to sales will rise slightly, and business men will be a little more cautious than they have been since the end of 1958 in adding to their stocks.

Retailers are looking forward to another record year.

The increase in retail sales in 1960 is likely to match the 7 per cent increase over the year-earlier level set in 1959. The most noticeable gains are expected in new autos, especially in the compact models, and in appliances. More moderate, but steady, gains are likely in furniture, floor coverings, and linens.



HIGHER EXPENSES *and lower receipts from marketings will cut 1960 farm income. Source: U.S. Dept. of Agriculture.*

A favorable response to early 1960 showings at most wholesale markets indicates that apparel retailers are confident of appreciable sales gains in men's and women's spring and summer merchandise. Children's apparel will continue to show substantial year-to-year gains.

Increases over year-earlier levels are likely to narrow somewhat after mid-year, as consumers hear reports

An Executive-Training Specialist Reveals . . .

Five Practical Suggestions on How to Speed-Up Your Progress in Business

"The one question I'm asked most often is: . . . Is there a *secret* of success in business . . .

"My answer, quite simply, is no if, by 'secret', one means a magic formula . . .

"But there are practical, time-tested *reasons* why some men do so much better than others . . .

"They are: A willingness to pay the price of success, and a knowledge of business fundamentals."

By James M. Jenks

It's no secret that industry today needs executives badly to replace management men who retire or otherwise become inactive.

Despite everything that has been done to ease this shortage, the problem remains acute. One explanation was advanced by a well-known writer recently. He said, "The rapid and extensive growth of industry during the past decade has created a 'lost generation' among younger executives. There simply hasn't been time for them to acquire broad, practical experience in all phases of business. Thus, most of them have specialized in a particular function of business."

However over-simplified that statement may be, it does point up the importance of this advice:

Devote a few hours each week to the organized study of business fundamentals—Somebody, after all, has to coordinate the activities of all departments . . . and this naturally calls for a working knowledge of the major business functions. *Only* men who understand these principles can effectively communicate with department heads —make quick, accurate decisions—elevate their thinking to the executive level.

Take the initiative in training yourself, without waiting to be told what you should do to qualify for promotion. Remember that the primary responsibility for self-improvement falls on *you alone*. Most companies are willing to cooperate with and help employees—but only after the individual has demonstrated ambition.

Accept every assignment offered you, no matter how unrelated it may be to your regular duties. You should, in fact, go out of your way to look for such work to help acquaint yourself with new and unfamiliar business procedures.

"Stick out your neck"—take calculated risks—whenever you're reasonably sure that you're on solid ground. Unless you develop the confidence and courage to act boldly when decisive action is called for, you'll never pass the acid test of leadership.

Accept the fact that, in order to succeed, you must be willing to pay the price of success. In many respects this is the toughest of all the steps upward . . . because it affects your family as well as yourself. It frequently means delayed dinners—evenings studying rather than partying—uprooting family ties and friends for better opportunities elsewhere. And, to be entirely truthful, the major executive must usually continue to pay "the price of success" throughout his active career.

It wouldn't surprise us if, at this point, we had discouraged a large part of the men who started to read this message from reading further. But this is not, necessarily, a bad thing. Even some of the people who could qualify, with the proper training, for a responsible management job are sometimes more content with teaching school . . . or taking orders rather than giving them . . . *Everybody*, in short, is not cut out to be an executive. But if you're temperamentally suited for managerial work and can cope with its endless problems, no other field is so challenging, so absorbing, so satisfying.

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of some easing in business activity, but the year as a whole should set a new record.

Personal income will climb to new peaks through the first half of the year and remain high for the rest of the year.

Although consumers will be better off, continued increases in prices will cut into income gains. The fractional increase that occurred in the consumer price index in 1959 will be repeated in 1960. However, food prices will show little change and may even decline as they did last year. This would offset some of the effect of increases in most other lines, particularly steel products. Marked price increases, however, are unlikely if the Federal budget is balanced as now planned and money remains tight.

Both higher building costs and expensive mortgage loans will continue to have an adverse effect on home building throughout most of 1960. A 10 per cent dip in new housing starts is likely for 1960 as a whole, compared with 1959.

The 11 per cent gain in over-all construction outlays that occurred in 1959 largely represented a spurt in home building. This year, a much smaller gain of perhaps 2 or 3 per cent is likely. The gain will come primarily from higher outlays for industrial building and the construction of commercial structures, such as office buildings and stores.

For the fiscal year 1961, beginning next July 1, President Eisenhower has submitted a Federal budget with a $4.2 billion surplus. He estimated spending at $79.8 billion and revenues at $84 billion. The spending figure is up $1.4 billion from that of the current year, the most noticeable increases being in outlays for interest in the national debt, foreign military aid, and veterans' services and benefits. The President proposed higher postal rates to cut the deficit in postal service expenditures and a gasoline tax increase to permit a more extensive construction program for the interstate highway system. Proposed outlays for military defense showed little change from those expected for the current year. END

This report was prepared in the Business Economics Department, DUN & BRADSTREET, INC., by John W. Riday.

Mail, catalogs...

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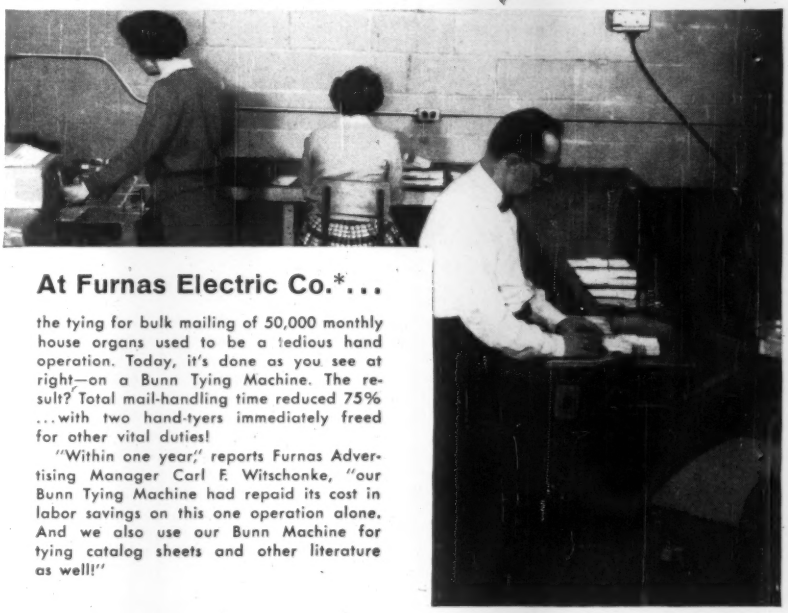

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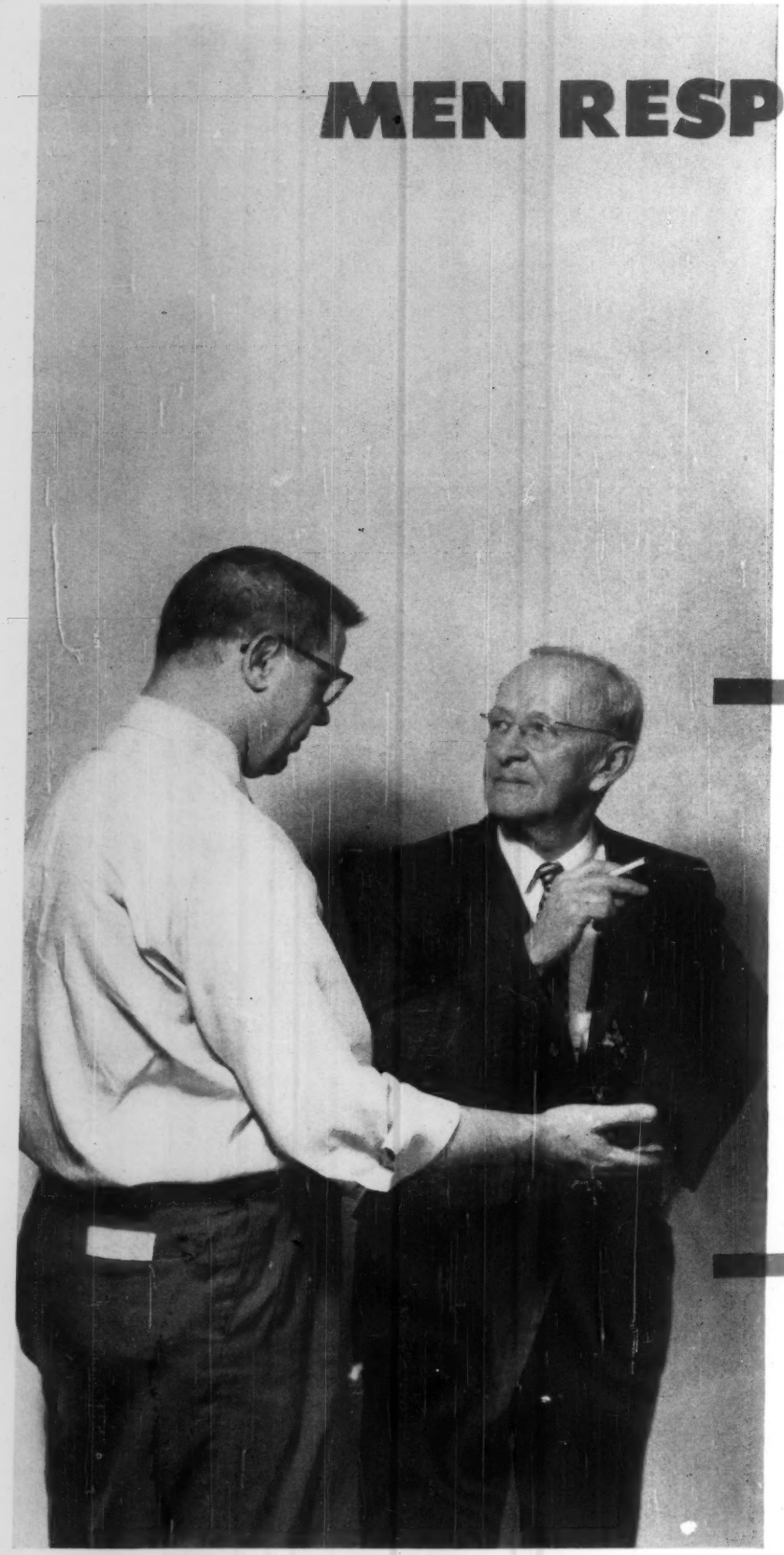
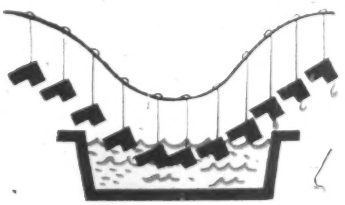


METAL CLEANERS



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The company with adequate cash available at all times is at a distinct competitive advantage. If your company will use outside funds in 1960 to assure maximum progress and profit, investigate our method. COMMERCIAL CREDIT'S advances to manufacturers and wholesalers to supplement cash working capital reached a record high of one and one-quarter Billion dollars last year.

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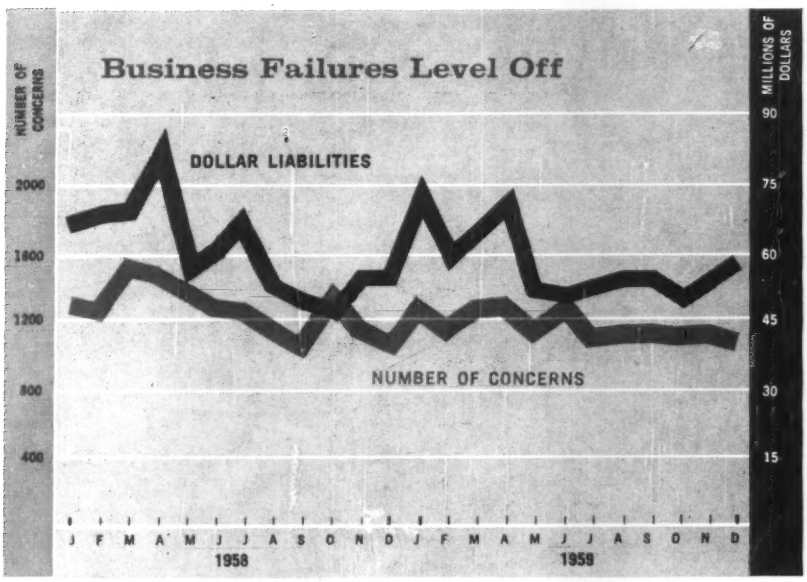
Business Failures

December casualties down again
Liabilities dip below year-earlier level



BUSINESS failures dipped in December to the lowest level in five months, bringing the year's total to 14,053. This was 6 per cent below the recession-high of 14,964 set in 1958. Most of the decline was concentrated in the first half of the year. Despite this downturn, however, casualties stood at the second-highest level since prewar 1939.

The rate of failure in relation to the total business population dropped back to the 1957 toll of 52 per 10,000 concerns listed in the DUN & BRADSTREET *Reference Book*. It was moderately below the 56 per 10,000 in 1958 and considerably less severe than the prewar rate of 70 in 1939.

Dollar liabilities involved in the year's casualties total $692.8 million, off 5 per cent from a year earlier. Fewer businesses failed in all size groups below $1 million. Those in excess of that amount edged up to a record high.

All types of operation except service had lower tolls during 1959. Transportation, personal service, and repair concerns accounted for the contrasting increases in service mortality. Improvement was noted in all retail trades. The sharpest declines occurred among furniture stores, down a third from 1958, and among drug stores, which fell to a seven-year low. Manufacturing failures ran 8 per cent lower than in the previous year, the only rise being in the transportation equipment industry.

Within wholesale trade, marked declines in most lines were partially offset by increases among

THE FAILURE RECORD

	Dec. 1959	Year 1959	Year 1958	% Chg.†
DUN'S FAILURE INDEX*				
Unadjusted	46.1	51.8	55.9	−7
Adjusted, seasonally	49.6	—	—	—
NUMBER OF FAILURES	1080	14053	14964	−6
NUMBER BY SIZE OF DEBT				
Under $5,000	123	1841	2028	−9
$5,000–$25,000	493	6664	7015	−5
$25,000–$100,000	329	4202	4456	−6
Over $100,000	135	1346	1465	−8
NUMBER BY INDUSTRY GROUPS				
Manufacturing	231	2465	2680	−8
Wholesale trade	119	1387	1431	−3
Retail trade	478	6873	7514	−9
Construction	163	2064	2162	−5
Commercial service	89	1264	1177	+7
LIABILITIES (*in thousands*)				
CURRENT	$59556	$692808	$728258	−5
TOTAL	60054	699431	740451	−6

*Apparent annual failures per 10,000 enterprises listed in the DUN & BRADSTREET *Reference Book*.

†Percent change, Year 1959 from Year 1958.

In this record, a "failure" occurs when a concern is involved in a court proceeding or in a voluntary action likely to end in a loss to creditors. "Current liabilities" here include obligations held by banks, officers, affiliated and supply companies, or the governments; they do not include long-term publicly held obligations.

Day after day . . .

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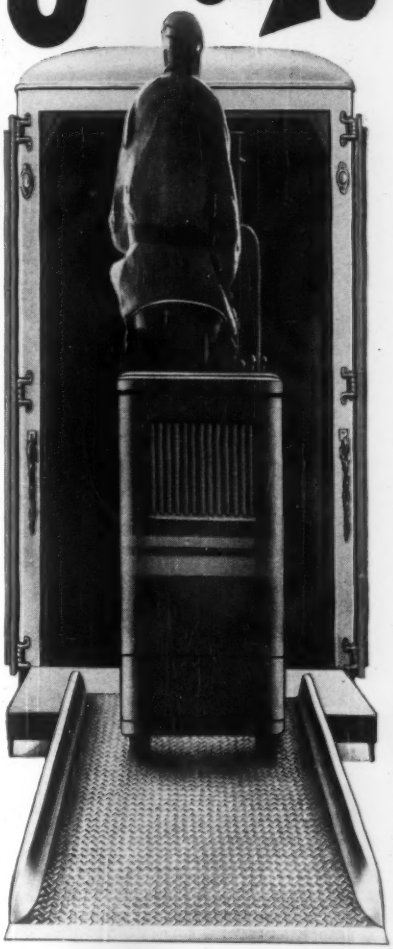
MAGNESIUM DOCK BOARDS
Squeeze



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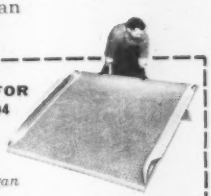

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dealers in chemicals, drugs, and automotive equipment. Heavy construction contractors suffered higher mortality during 1959, although casualties dipped among general builders and subcontractors.

Seven of the nine major geographic regions reported a brighter failure picture. Their tolls fell below the 1958 level, ranging from a 3 per cent downturn in the Pacific States to a 17 per cent drop in the East South Central States, where casualties were the lowest in four years. Contrasting increases prevailed in the East North Central Region, where Illinois and Ohio failures climbed under the impact of the steel strike, and in the Mountain States, where Colorado pushed up the total considerably.

Large city casualties turned down 10 per cent in 1959. This was more than twice the decline in non-metropolitan districts. Philadelphia, Baltimore, and Detroit reported noticeably lower failures.

FAILURES BY DIVISION OF INDUSTRY

	Cumulative total (Twelve Months)		Liabilities in million $ (Twelve Months)	
	1959	1958	1959	1958
MINING, MANUFACTURING	2465	2680	207.7	245.6
Mining, coal, oil, misc.	91	86	8.4	17.6
Food and kindred products	176	189	14.3	17.4
Textile products, apparel	420	493	24.1	33.1
Lumber, lumber products	503	530	24.6	33.1
Paper, printing, publishing	164	181	8.9	8.4
Chemicals, allied products	62	66	4.6	4.5
Leather, leather products	72	100	6.7	12.7
Stone, clay, glass products	48	62	4.1	10.6
Iron, steel products	136	177	15.1	16.8
Machinery	254	294	43.0	38.5
Transportation equipment	108	80	9.5	16.8
Miscellaneous	431	422	44.4	38.7
WHOLESALE TRADE	1387	1431	82.2	82.0
Food and farm products	290	330	22.6	20.9
Apparel	42	62	1.7	2.7
Drygoods	42	46	2.0	1.5
Lumber, bldg. mats., hdwre	153	175	10.2	12.8
Chemicals and drugs	60	50	1.7	1.3
Motor vehicles, equipment	74	67	3.3	2.3
Miscellaneous	726	701	40.7	40.5
RETAIL TRADE	6873	7514	226.8	225.3
Food and liquor	1113	1127	30.0	25.7
General merchandise	281	291	16.2	11.4
Apparel and accessories	1011	1140	38.8	29.5
Furniture, furnishings	816	1041	35.9	45.1
Lumber, bldg. mats., hdwre	453	504	15.1	16.0
Automotive group	1015	1101	26.9	39.3
Eating, drinking places	1334	1436	35.5	37.3
Drug stores	122	165	3.1	4.0
Miscellaneous	728	709	25.3	17.0
CONSTRUCTION	2064	2162	121.9	115.1
General bldg. contractors	749	872	66.1	62.8
Building subcontractors	1159	1169	42.5	41.0
Other contractors	156	121	13.3	11.4
COMMERCIAL SERVICE	1264	1177	54.2	60.3
TOTAL UNITED STATES	14053	14964	692.8	728.3

Liabilities are rounded to the nearest million; they do not necessarily add up to totals.

This report was prepared in the Business Economics Department by Rowena Wyant.

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WASHINGTON Business Front

JOSEPH R. SLEVIN

Tight-money fight moves on to new ground as experts start getting down to specifics.

In prospect: new pressure on Government to step in with a kit of "selective credit controls" in key areas.

How much inflation in 1960? Latest Administration forecast puts expected price level rise at 1½ per cent.

WASHINGTON, D.C. — There's a new look to the attack on tight money. Time was when it was chiefly a self-serving campaign by labor spokesmen and a political issue for "liberal" Democrats, but that isn't true any longer. Monetary policy is getting increasingly close scrutiny from crack professional analysts, and their studies suggest that changes may be in order. Early action is not likely, but the days of broad, generalized debate are numbered. The experts are beginning to develop some facts.

Political critics of tight money will continue to complain that it hurts farmers, home buyers, small business men, and local governments. They will charge, as they have before, that the only people who gain from tight money are the bankers. They will hold tight money responsible for slow economic growth, persistent unemployment, and damaging recessions.

Defenders of monetary restraint will reply—as they have before—that lending power must be curbed during periods of rising activity to prevent an inflationary expansion of credit. They will warn that the alternative is an upward spiral of prices brought about by too much money chasing too few goods. And they will insist that the inevitable consequence of a failure to curb credit will be a runaway boom followed by a bust.

But the argument has deepened out beyond these contentions and become more sophisticated. The experts are looking beneath the surface, examining the key sectors of the economy—and punching big holes in the broad, generalized theories about the impact of general monetary restraints on business activity. Some of the experts believe with the Democratic critics that tight money has been hampering economic growth. Others do not. But they are raising questions about the effectiveness of monetary policy as it now is being managed by the Federal Reserve System. These questions will have to be studied further—and eventually answered.

What is happening is that the American economic and financial system is becoming increasingly complex. Simple policies no longer are adequate. Economic and financial measures have to be shaped to fit specific situations and to deal with particular problems.

Tax and wage probes

Monetary policy is an important example of the kind of re-thinking that now is in progress, but it is not the only example. Exhaustive studies of the Federal tax system currently are being pressed in an attempt to discover how individual taxes influence economic activity. Dissatisfaction with a persistent surge of wage and price advances has led to an examination of devices for bringing public pressure to bear on big industry and big labor. All-out controls are the extreme solution. But an impressive number of less drastic plans have been suggested.

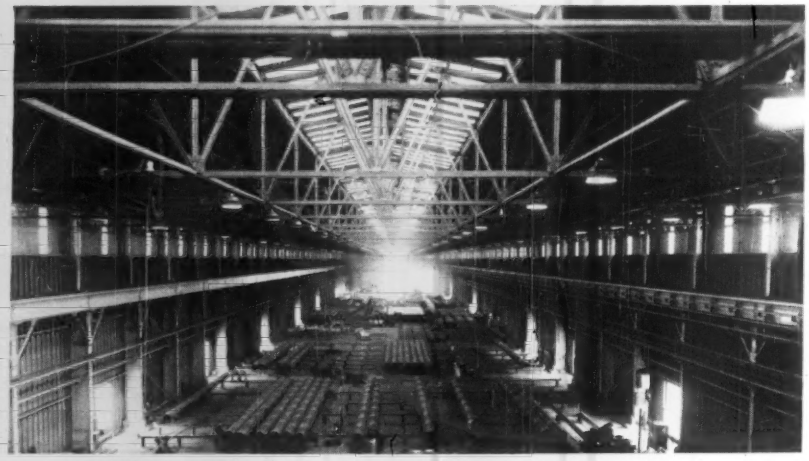
Congressional hearings were held last year on proposals for suspending price increases in major industries until a special Government panel could hold a public inquiry. There have been suggestions for fact-finding boards that would have the power to report wage and price "facts" and for boards authorized to recommend that wage and price increases of specified size be granted—or withheld.

There is similar ferment in many other fields. Consider the search for techniques that will prevent another major industrial strike like the damaging 116-day steel work stoppage. Or the push for elimination of labor featherbedding, of uneconomic Government subsidies, and of other practices that hamper national productivity.

All these investigations are being pressed because there is dissatisfaction with the way the American economy has been performing. It's the most efficient and the most powerful economy in the world, but the critics contend that it can do better. And they insist that it should and must do better if the United States is to meet its responsibilities to its own people and win the life-or-death struggle with the Soviet Union.

The political attack on monetary policy reached one climax last sum-

WHY THE TREND TODAY IS TO ARMCO STEEL BUILDINGS FOR INDUSTRY



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mer. President Eisenhower asked Congress to remove the 4¼ per cent interest rate ceiling on Government bonds, and Congressional Democrats replied by using the request as a springboard for a vigorous campaign against tight money. The Democrats think they have a valuable Presidential election issue in the tight money, high interest rate debate, and they will continue to fire away between now and next November.

But more interesting at the moment than the charges of the professional politicians are the observations of the professional economists, who are blazing the trails the politicians will follow later on.

The best recent case in point is the report of the staff of the Democratic-controlled Congressional Joint Economic Committee. These experts joined with the Democrats in arguing that tight money has helped to slow the growth of the economy in recent years. But they don't want to do away with monetary restraints. They urge instead a somewhat easier general monetary policy, coupled with an attempt to devise selective credit controls that will limit expansion in the volatile sectors of the economy that have aggravated boom-and-bust movements in recent years.

The Joint Economic Committee experts contend that general monetary policy has hit hardest at home building. They explain that statutory interest rate ceilings curb Federal Housing Administration and Veterans Administration mortgage guarantee operations when the cost of money rises. The next hardest-hit sectors are local governments and small businesses, these experts maintain.

No help in key areas

But they find there has been only a "slight" effect on business plant and equipment spending, a "weak" influence on consumer credit, and "very little" effect on business inventory buying. The staff economists emphasize that plant and equipment outlays, consumer purchases of automobiles and other durable goods, and business inventory operations "are subject to the greatest fluctuations and are the most serious generators of instability."

The staff does not flatly say that these sectors should be subjected to selective credit controls. In fact, it suggests that there may be insurmountable difficulties in some cases.

It is most dubious about the feasi-

bility of checking overly rapid plant expansion, though it thinks certain financial techniques are worth investigating. It believes that the best case can be made for placing selective controls on consumer credit, and it recommends an attempt to reduce inventory fluctuations by adopting radically new and considerably more selective methods of controlling lending by the banks.

As for price increases that are imposed by the "market power" of strong industries, the staff says there is nothing general monetary restraint can do to help. It suggests adoption of "more vigorous antitrust policies" as the best alternative.

Perhaps the strongest clue to the Administration's attitude toward inflation prospects can be found in the words it uses when it talks about price stability. It doesn't say that prices must be held steady. Instead, it talks of a goal of "reasonable" price stability. That doesn't mean the Administration approves of creeping inflation of 2 per cent or 3 per cent a year. But it shows that the Administration is keenly aware that there may be some upward price movements.

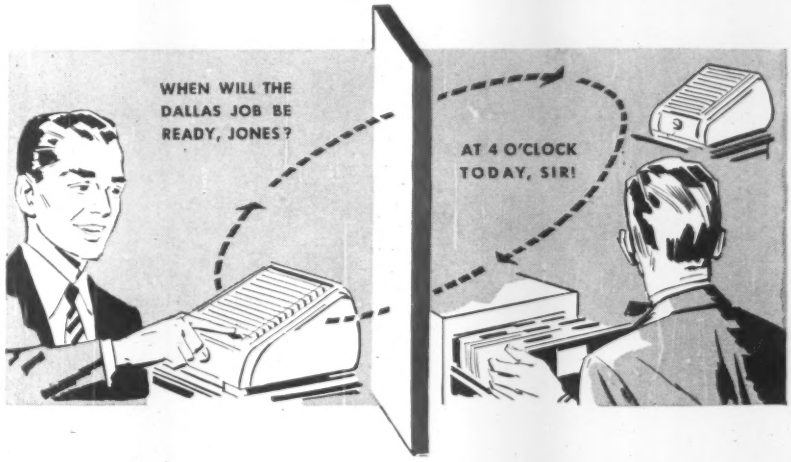
The current prediction of Government economists is that consumer prices will rise about 1½ per cent this year. The Administration won't be too unhappy if that forecast comes true, but whether it would consider a continuing price rise of this rate to be "reasonable" price stability is anybody's guess.

One of the Administration's most difficult jobs is to keep people stirred up after it has aroused them to a potential danger. Wage-price inflation is one case in point.

Can industry hold the line?

The steel dispute has provided a major test of industry's determination to hold the line against wage-price inflation, but Government economists fear that management will be under renewed pressure this year. Economic conditions will make it hard for industry to resist wage demands. The United States will have a full-employment economy in 1960. Buying demands will be strong, and business men may find it relatively easy to pass on higher costs in the form of steeper prices. Many executives will be sorely tempted to follow the line of least resistance by granting substantial wage boosts while profit opportunities are large. END

How to get more working minutes per hour!



There's no need for personnel to waste valuable time walking back and forth for information and instructions. With Executone Intercom they just push a button and talk—*instantly!*

Walking time becomes *working* time. Telephone lines are kept open for outside calls; roving employees are located *immediately!* Production is increased, costs are cut.

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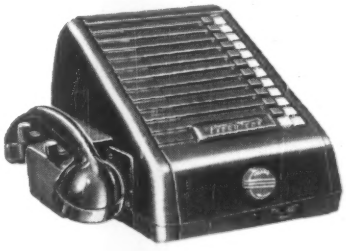

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Even the wastebasket can go — there's one inside *this desk*

How to be a "*clean desk*" man

New "Clutter-Proof" Desk has ingenious ability to lend a hand to a man at his work

Take a good look around your office tomorrow and see all the clutter on top of desks. A lot of valuable *space and time are being lost* there.

These same desk workers could get more done if they sat at new Shaw-Walker "Clutter-Proof" Desks.

Fully 75% of the things that drift around on other desks have a *specific place inside* this desk.

In the *organized drawers* there are *off-the-desk* trays for incoming, outgoing and pending letters, *off-the-desk* space for work organizers, work separators, deferred projects, tickler, binders, books, pads, forms, card lists. And imagine this—there's even an *in-drawer* wastebasket and *in-drawer* phone!

With a Shaw-Walker "Clutter-Proof" Desk *usable working space on the desk is actually doubled.*

See these new "Clutter-Proof" Desks at our branch or dealer store, or write Shaw-Walker, Muskegon 50, Mich. for our 252-page Office Guide.

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Voice of Industry

How Real Is the Dollar Crisis?
Space Age: Fact or Fancy?
Pay-As-We-Go Social Progress
Atomic Power Grows Competitive

ROY L. REIERSON, *vice president and chief economist, Bankers Trust Company.*

Good as Gold

Today this country faces a troublesome balance-of-payments problem. Imports are on the rise, American goods are encountering ever stiffer competition abroad, our gold reserve is declining, and the dollar has repeatedly been described as "weak" in foreign exchange markets.

Some observers are viewing these developments with alarm. They hold that the dollar is nearing a crisis and that devaluation is imminent. Others hold that the strain of our balance of payments is a passing problem which will correct itself soon, perhaps within a matter of months.

Actually, both these extreme positions have no validity in fact. The U.S. Government has expressed its determination to hold the gold price at $35 per ounce. The corollary is that gold would be made available to foreign control banks. This determination is bolstered by our enormous gold stock, which is more than adequate to meet all possible withdrawals of foreign funds.

There is no present "dollar crisis," and none is in prospect. It can be said with assurance that, for the present and as far ahead as can be predicted, gold will remain available to foreign central banks under the terms and conditions currently in effect and that there is no likelihood that the dollar price of gold will be altered.

However, even though no crisis is at hand, the balance-of-payments problem is too serious to be ignored any longer. Continuation of recent trends would indeed have disturbing implications for the dollar as well as our entire economic leadership in world affairs over the long run.

From a speech before the Southwestern Bell Telephone Company Management Conference.

DR. SIMON RAMO, *executive vice president, Thompson Ramo Wooldridge, Inc.*

Back to Earth

Talk of living in a "space age" is ridiculously premature. In a real space age, a substantial part of our population would be traveling and living in space or on other planets or the moon. Perhaps some day the means and the motivations will exist to create a true

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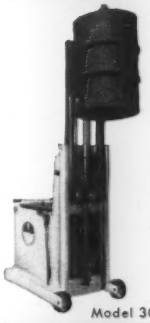

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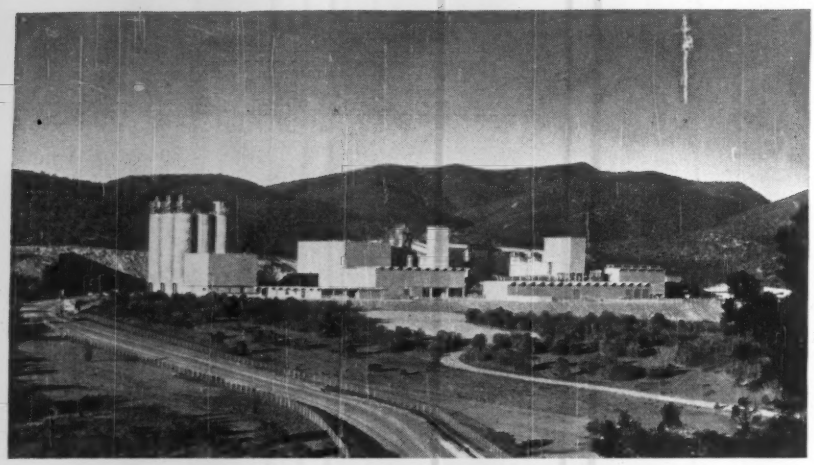
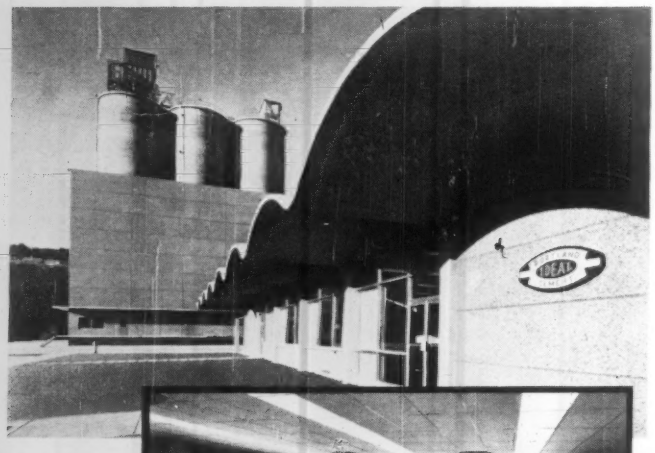


TIJERAS, NEW MEXICO, PLANT



The plant office building, above, with its thin shell concrete roof; storage silos and packhouse in background. At right, the central control room from which all major units are operated.

AT IDEAL CEMENT COMPANY: NEW CONCEPTS IN CEMENT PLANT DESIGN

Ideal's new plant just completed at Tijeras, New Mexico—dust-free, completely instrumented, utilizing the newest techniques in architectural concrete design—the most modern, most beautiful cement plant in the world today.

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space civilization. Meantime, we should take advantage of our new ability to put equipment into space to attain better world communications, navigation, and weather prediction.

However, we should not let our excitement over everything with a space label cause us to miss the point that these developments are natural extensions of our surface civilization and are not a whole new way of life made possible by space.

Since we cannot do everything at the same hectic pace, space projects for improving our standard of living should stand in line and face the same careful, competitive, common-sense scrutiny as the equally urgently needed airline navigation and traffic control system, peaceful nuclear power, and better schooling. Even if psychological warfare with science is here to stay, it is not obvious that a space success will buy us more prestige than an advance in curing disease.

From a speech delivered at a Steinmetz Memorial Lecture.

GWILYM A. PRICE, *chairman, Westinghouse Electric Corp.*

Closing the Gap

The Atomic Energy Commission and the electrical industry—utilities and manufacturers—are well into a program aimed at achieving economic production of atomic power. Three plants are in successful operation. Six other plants are under construction, and four of them, each with a capacity of more than 100,000 kilowatts, are scheduled to come into production next year. Many other plants are in various stages of development.

The time is just about here when atomic power will compete commercially with conventional facilities. Of course, it will be quite a while before a nuclear power plant can compete in

fuel costs with a conventional plant built on top of a coal mine. But large nuclear power plants of a proven type can now be built which will produce electricity in some high fossil fuel cost areas at a cost competitive with conventional plants. And it is now possible to guarantee the cost of those plants, their capacity, and the amount of fuel they will consume.

From a speech before the American Society of Mechanical Engineers.

STANLEY C. HOPE, *president, National Association of Manufacturers and president SoundScriber Corp.*

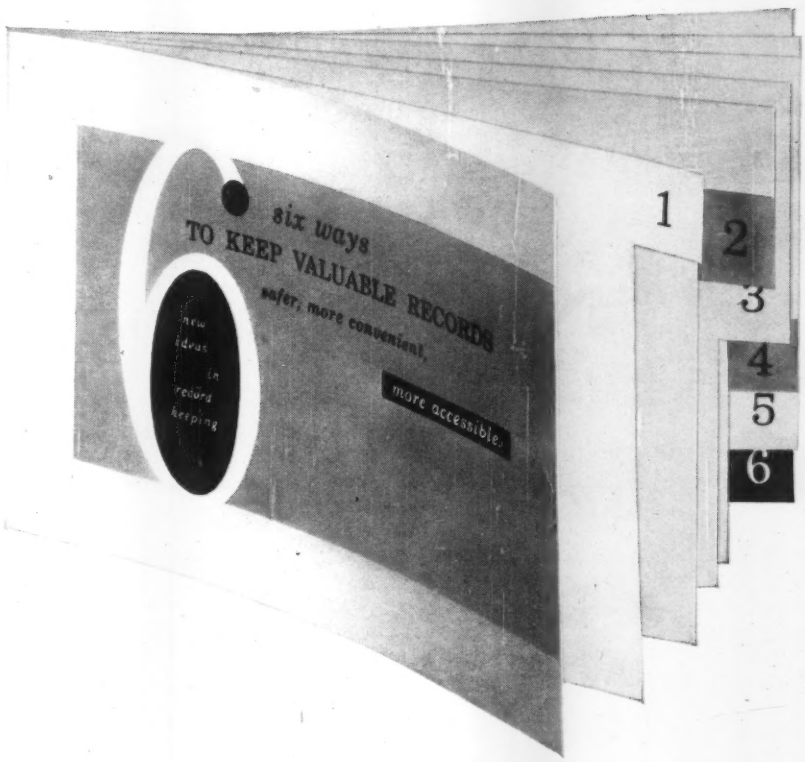
Buying the Better Life

In our country, the development of our social institutions and the widening of the cultural and spiritual horizons of our citizens has proceeded step by step with the growth and expansion of our economy.

As our economy grows, this process will continue, probably at an accelerating pace. We will have more and better schools, hospitals, roads, and recreational facilities. We will have more safeguards for the security of the individual. We will have more cultural opportunities for our people.

All of these things will come about as the economy produces the wherewithal to pay for them—and they cannot come about until it does. Programs in pursuit of social progress which encroach on economic freedom and hamper growth are the surest way to postpone such progress. It will get us nowhere to ride roughshod over the vital interests of any segment of the economy merely because one political faction or another has the propaganda apparatus or the votes to make its views prevail.

From a speech before the Congress of American Industry.



Free idea booklet is crammed full of facts and *new* ideas...ideas that cut the cost of your office operations...ideas that speed work...ideas on how to better protect valuable records. The Mosler Safe Company's more than 100 years of experience in developing dependable record keeping equipment has gone into this booklet. It's yours free. Send the coupon...TODAY!

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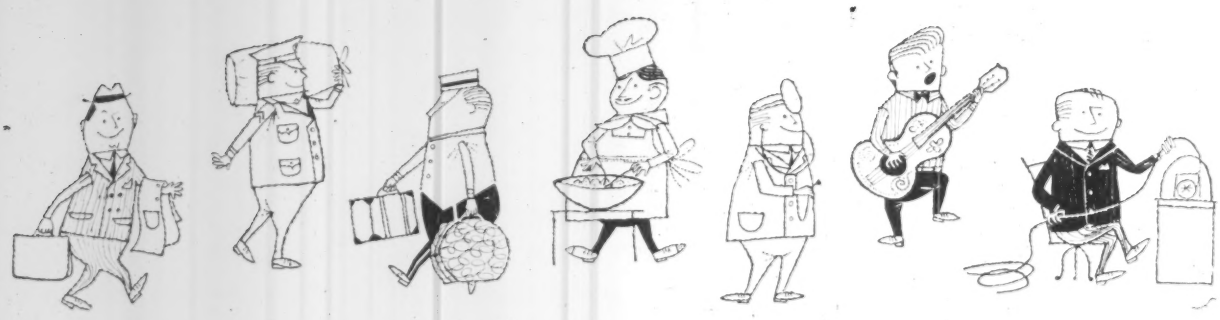
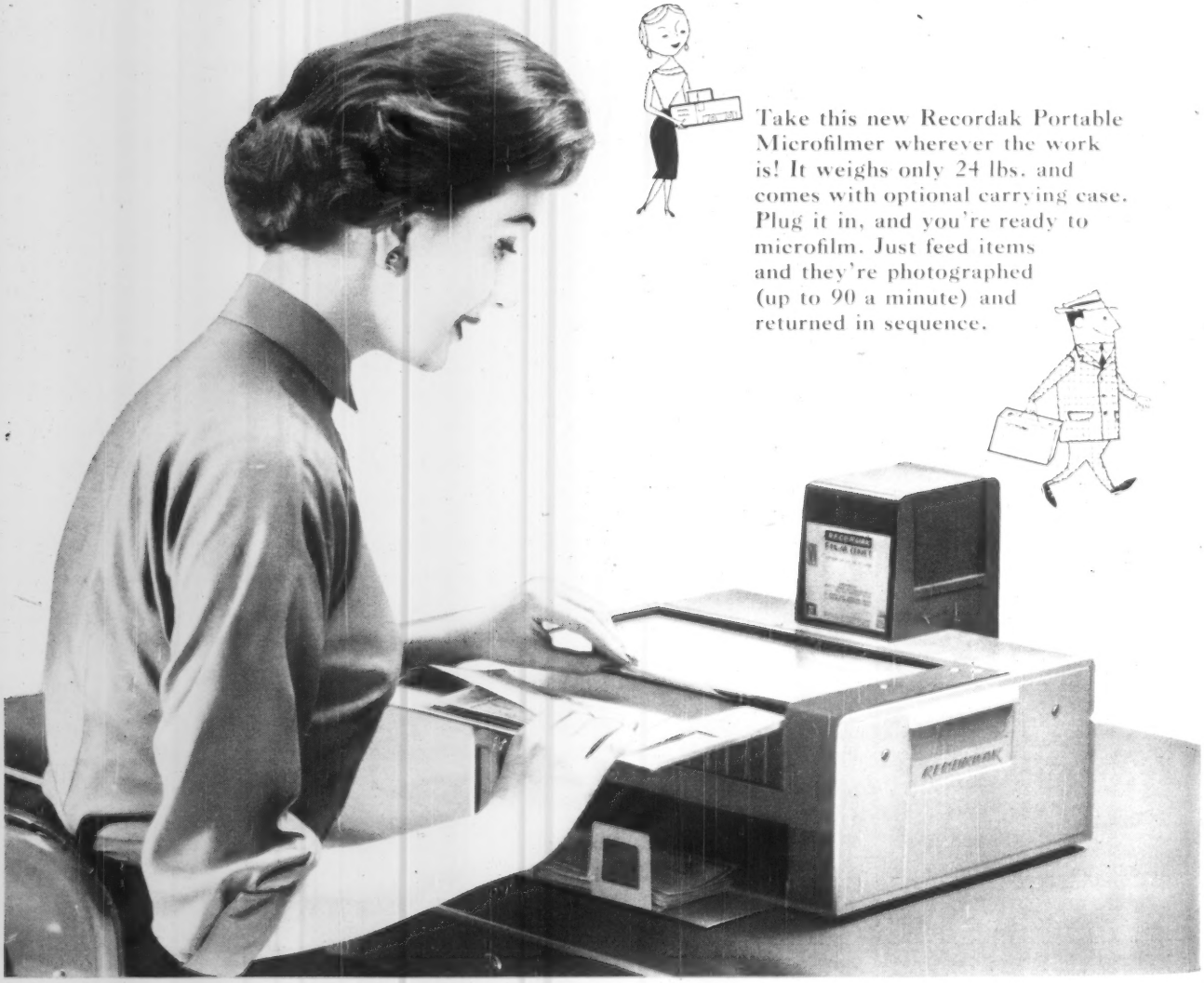


Now every business—including the savings which

Take this new Recordak Portable Microfilmer wherever the work is! It weighs only 24 lbs. and comes with optional carrying case. Plug it in, and you're ready to microfilm. Just feed items and they're photographed (up to 90 a minute) and returned in sequence.



yours—can enjoy microfilming alone provides!

LIKE thousands of concerns in all types of business, you can speed your daily routines with Recordak Microfilming.

And, best of all, you don't have to be a large company to start saving with the new low-cost Recordak Portable Microfilmer. You can copy records for a small fraction of a cent apiece . . . do away with costly manual copying on almost any record-keeping job.

Typical applications? You can use the new Recordak Portable to photograph the checks you receive daily. Eliminates keeping a descriptive check ledger. And it also saves the day if checks are ever lost or stolen.

Another use of this Recordak Portable Microfilmer gets bills out to customers four times faster by eliminating a description of each item on bill! All told, there are hundreds of short cuts possible with this unique photographic process.

Just tell us your type of business. Chances are we can show you how companies like yours are saving right now! (In addition to the new Recordak Portable, there are high-speed Recordak microfilmers for large-volume operations.)

RECORDAK®

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originator of modern microfilming—*now in its 32nd year*

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Gentlemen: Send free booklet giving details on the Recordak Portable Microfilmer.

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THE INSIDE STORY OF FALCON FLEET ECONOMY!

America's lowest-priced 6-passenger car—the New-size Ford, the Falcon, is also America's most economical car to operate and maintain!

It started with Experience Run, U.S.A., and the good news has been rolling in ever since! Falcon fleet economy—proved over every last mile of U.S. numbered highway—is now showing its stuff in regular fleet operations across the country.

Up to 30 miles on a gallon of gas can be obtained in Falcon fleet cars. Even the first fleet of cars assembled averaged 28.4 in Experience Run, U.S.A., under every conceivable condition! And this with first-rate, six-cylinder performance that brought cheers from veteran drivers.

You change oil only every 4,000 miles (twice the usual distance) because its Full-Flow oil filtering system filters *all* the oil *all* the way through. A *double-life* aluminized muffler is standard. The Falcon's brilliant Diamond Lustre Finish *never* needs waxing to keep it beautiful. And, of course, all Falcon savings *start* with the price . . . up to $124 *less* than other cars in its field.*

Falcon's fenders are bolted on . . . cost less to replace! The Falcon was designed, engineered and built with service experts consulted at every turn. Here's a sample of the kind of savings you get with Falcon replacement parts:

ITEM	FALCON	CAR "C"	CAR "V"	CAR "R"
Hood	$31.45	$63.50	$44.75	$39.00
Deck Lid	35.18	72.20	40.65	65.00
Distributor	17.00	21.75	27.50	23.50
Carburetor (1)	17.85	22.75	25.50	24.50
Front Fender	29.95	46.50	37.20	37.50

Service labor time is lower, too! The fleet's out and on the move—to your profit—thanks to the carefully worked-out Falcon service procedures. This means your Falcon fleet will be on the road longer . . . give you better service. Here are some examples of how Falcon cuts downtime:

OPERATION	FALCON	CAR "C"	CAR "V"	CAR "R"
Minor Engine Tune-up	1.5 hr.	1.9 hr.	N.A.*	2 hr.
Rear Axle Shaft Replacement	.9 hr.	1.7 hr.	N.A.*	2.5 hr.
Cylinder Head Gasket Remove and Replace	2.4 hr.	4.3 hr. (2)	N.A.*	2.2 hr.
Starter Motor Remove and Replace	.3 hr.	.5 hr.	N.A.*	1 hr.
Carburetor Assembly Remove and Replace	.4 hr.	.8 hr.	N.A.*	.5 hr.
Rear Brake Drums Replacement	.6 hr.	.8 hr.	N.A.*	.6 hr.

*Information not available

15% less insurance cost in some instances is another Falcon saving. These savings are possible because the Falcon has been designed and built for minimum, quick, low-cost servicing.

Room for 6 . . . and all the luggage. Inside a Falcon, there's man-size stretch-out room . . . with no gearshift on the floor to displace the middle seat passenger. The trunk is a really roomy 23 cubic feet *plus*. Rear location gives you wide, flat floor space . . . low deck opening for easier loading!

World's most experienced new-size car! Only the Ford Falcon of all the new-size cars has the fleet experience you want in your business cars! In Experience Run, U.S.A., a fleet of Falcons duplicated in three weeks, running night and day, a *solid year's* fleet experience! Ask your Ford Dealer for the full story.

FORD DIVISION, *Ford Motor Company*

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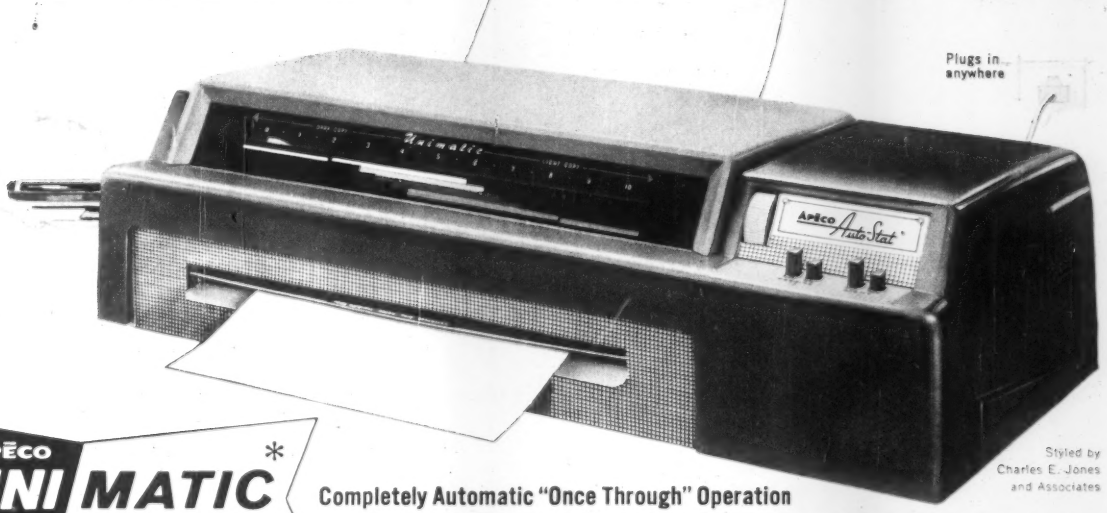

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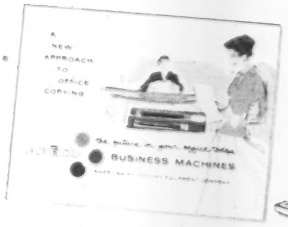

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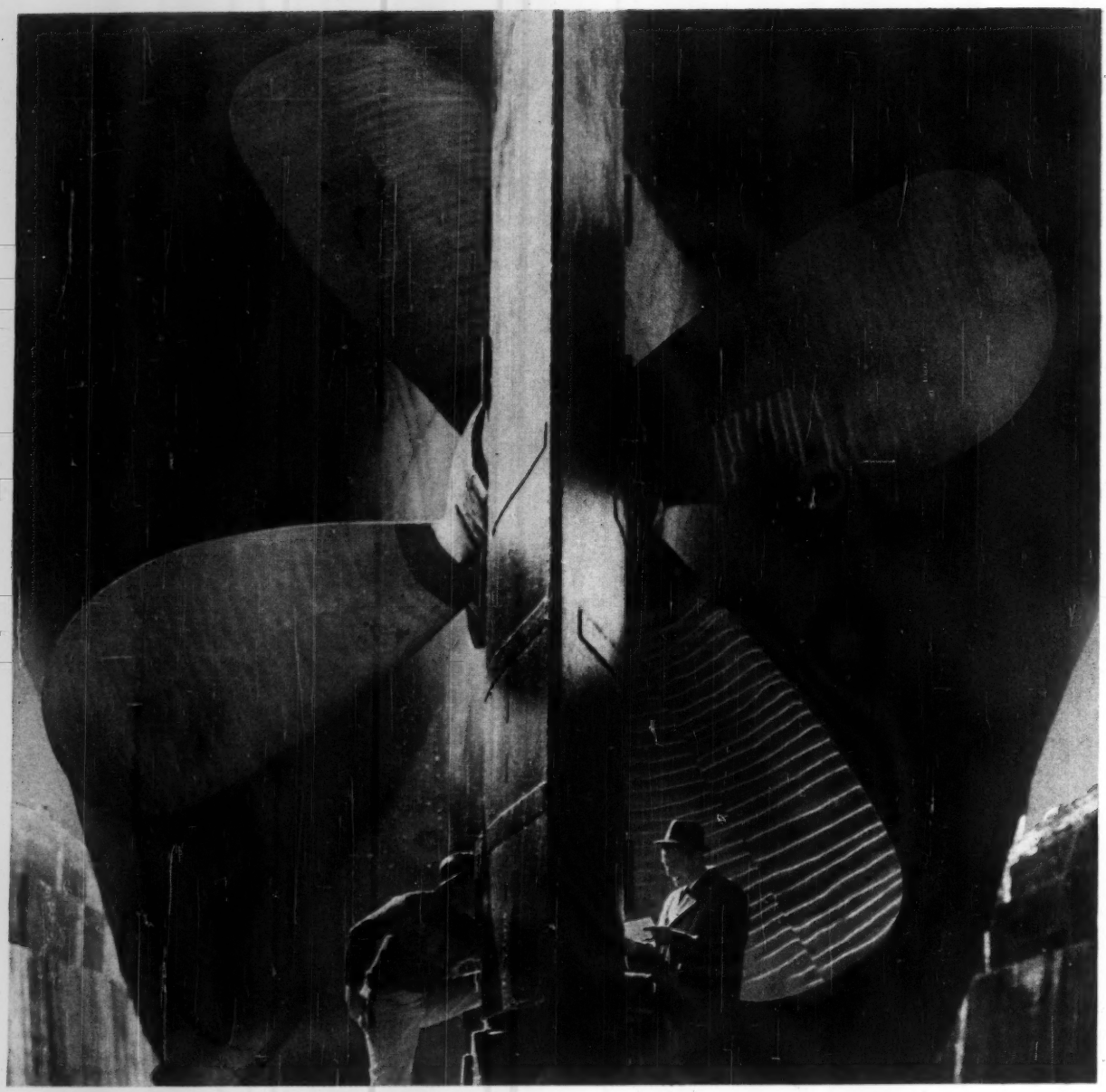

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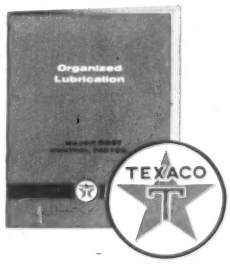

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168 Branches, Offices & Affiliates Throughout the World
85 in Greater New York 83 in 28 Countries Overseas

Statement of Condition as of December 31, 1959

ASSETS

Cash and Due from Banks	$1,949,570,903
United States Government Obligations	1,036,326,888
State and Municipal Securities	436,123,764
Other Securities	103,904,564
Loans	4,416,286,600
Customers' Acceptance Liability	80,952,598
Federal Reserve Bank Stock	18,600,000
International Banking Corporation	7,000,000
Bank Premises, Furniture and Equipment	63,899,129
Items in Transit with Overseas Branches	1,545,449
Other Assets	8,969,644
Total	$8,123,179,539

LIABILITIES

Deposits		$7,103,582,539
Liability on Acceptances and Bills		91,461,490
Foreign Funds Borrowed		6,058,600
Bills Payable		100,000,000
Reserves:		
Unearned Income		39,426,241
Taxes and Accrued Expenses		44,760,511
Dividend		8,280,000
Shareholders' Equity:		
Capital (*12,000,000 Shares—$20 Par*)	$240,000,000	
Surplus	380,000,000	
Undivided Profits	109,610,158	
	729,610,158	
Total		$8,123,179,539

Figures of Overseas Branches are as of December 23.

$556,109,015 of United States Government Obligations and $9,699,170 of other assets are pledged to secure Public and Trust Deposits and for other purposes required or permitted by law.

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FIRST NATIONAL CITY TRUST COMPANY

Head Office: 22 William Street, New York

Capital Funds $35,499,387

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WALTER B. WRISTON
Senior Vice-President

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Crisis of the Cities

Industry Heads for the Open

Urban congestion and high operating costs are driving many city-based companies to seek growing space in the suburbs and beyond. To stem the outgoing tide, cities are trying to clean out encroaching slums to make room for industrial expansion. Here are the facts about the future of the metropolitan center—facts that business must consider in its long-range planning.

ONCE upon a time, there were two life insurance companies. One lived in Hartford, the other in Newark. And both of them were popping their seams.

For the Connecticut General Life Insurance Company, the solution was to build a new $20 million office building five miles from the teeming hub of Hartford. The three-story, glass-sheathed building now stands in splendid solitude amid the rolling Connecticut countryside. To supply some of the amenities of city life, the company also provides a barbershop, beauty parlor, variety store, tennis courts, movie theater, and a bowling alley. And to help transport its 2,000 employees to and from the job each day, the company operates a chartered bus service and offers parking space for more than 1,000 cars.

For the Mutual Benefit Life Insurance Company, the answer was the exact opposite. Thirty years earlier, it had led the movement out of Newark by building in a residential area. But for its new building, the company decided to move right back into the center of town.

"In Newark, we had an ample supply of trained clerical help, good public transportation, and local stores that could supply our people with anything they need," explains one company executive. "When we move, we don't care to move an entire business district with us."

Each company, in its different way, found a solution to one of the most pressing business problems of the postwar era: where to put the new plant. And their experience illustrates the tug of war now going on between the city and the suburbs for new offices and factories. Pulling on one side is city convenience, labor supply, transportation, and communications. Pulling on the other side is country cheap land, parking space, and fresh air.

Until now, the city has fairly dominated our economic life. Population per square mile is 23 times as great inside the city as in the suburbs around it, according to one recent study. And, acre for acre, manufacturing in the city is nineteen times as great as right outside it.

But now, all signs point to a radical change—almost an upheaval—in our manner of living and producing. As far as homeowners are concerned, the suburbs have long since won out. The flight of population out of the city has been going on intensively for more than a dozen years and should continue at an even greater rate in the future. Our population is expected to increase by 60 million in the next fifteen years, and some 40 million of that gain is expected to crowd into the suburbs. By 1975, suburban population is expected to exceed city population in fourteen of the 24 largest metropolitan areas.

The trend of industry to the suburbs actually began more than half a century ago, but it was less pronounced, less dramatic, than the movement of homeowners. Only within the last decade or so has the shift of industry to the suburbs taken on boom proportions.

According to figures compiled by the Departments of Labor and Com-

merce, more than half the factories built in one recent year were outside the limits of the major cities. More than two-fifths of the stores and one quarter of the new office buildings were put up in the suburbs.

In some areas, the race to the country has been even swifter. The Chicago metropolitan area, for example, has seen more industrial construction in recent years than any other section of the nation. But of the 182 largest industrial construction awards made in the past five years for the entire Chicago area, only 54 were within the city limits. Suburbs within a 6-mile radius picked up 99 of the awards. The other 29 awards went to communities even farther out.

Boston, too, has watched its industry flee to the hinterlands at a shocking rate. Between 1947 and 1957, the city lost some 9,000 manufacturing jobs. In the same period, the suburbs ringing Boston picked up about 35,000 jobs. By 1957, about 70 per cent of all the manufacturing jobs in the Boston metropolitan area were located outside the city proper.

City manufacturing jobs dwindle

Even where the cities are not declining in absolute terms they are losing ground relative to their suburbs. In 1947, 83 per cent of the manufacturing jobs in the Cleveland metropolitan area were located within the city limits. By 1954, less than 70 per cent of the jobs were in the city. In St. Louis during the same period, manufacturing jobs in the city dropped from 71 per cent to 64 per cent of the total for the entire metropolitan area. In the San Francisco-Oakland area, the city's share of manufacturing jobs dropped from 56 to 50 per cent. The trend is nationwide.

Directly or indirectly, almost every business will be affected by these monumental changes in our pattern of production. Companies which must expand face the hard decision of whether to join the move to the country and perhaps abandon their customary labor pool, business contacts, and suppliers. And those content to stay in the city chance even more serious long-range consequences.

"Obsolescence and decay in many of the older industrial areas have placed real limitations on the abilities of the business located there to operate profitably," says Jervis J. Babb, area development chairman of the Committee for Economic Development. "Congestion and expensive transportation and materials handling have cost companies untold millions in wasted time and effort. Employers in old locations have seen their labor force deteriorate as people move and find jobs in new areas."

Why the flight to the suburbs? After all, the major factors behind the location of a plant—transportation, communication, water, labor, nearness of markets and raw materials—are the very things that have made the cities the commercial and manufacturing centers that they are.

Of all the reasons companies are deserting the city now, the major one seems to be space. Modern, low-slung factories need lots of room, and it's just not to be found in the heart of the cities. Chicago, for example, now has less than 4,000 acres of industrial sites still available. Philadelphia has less than 3,000 acres of vacant land zoned for industry.

It is possible to assemble an industrial site in the city by clearing obsolescent property, but the obstacles to doing so are formidable. "The land I wanted was criss-crossed by roads and splintered into a dozen different parcels owned by as many different people," explains one West Coast industrialist. "It was almost impossible to acquire it all without power of condemnation. Even if I could, it'd cost me more than $100,000 an acre to buy and clear the land. And so I went twenty miles out of town and bought some first-rate property for $15,000 an acre."

Close behind space as a reason for the movement from the city is congestion. For companies that depend upon quick transportation, life in the crowded city may be nothing less than death by slow strangulation. Their employees can't get to work, their supplies can't come in, and their finished products can't get out.

Since 1940, the number of cars entering New York City on a typical working day has increased by nearly 50 per cent. Even that is mild compared to most cities. On the average, urban traffic has jumped 69 per cent in just the last fourteen years.

Taxes are also a reason some companies favor the suburbs, but not often are they the deciding factor. Rates in the suburbs are usually lower initially, but experience has taught many business men that these tax honeymoons are likely to be short-lived. The circuit is inevitable: New plants bring new people, new people demand new services, and new services mean new taxes.

The role of the automobile

As available space in the city shrinks and congestion worsens, the suburbs look ever better by comparison. New highways are opening up vast new tracts to industrial development, and the ubiquitous automobile has freed companies from the necessity of building near public transportation and railroad sidings. Today, a new plant often can locate anywhere, as long as it has a decent road running by the door and plenty of parking space.

With industry and population deserting it for the suburbs, where does the economic future of the city lie? Authorities agree that the city still remains the logical place for a number of business services—preeminently those requiring large clerical and accounting operations and activities in

Why Suburban Grass Is Greener

Space

Fresh air and room to grow—the suburbs offer both at less cost.

Taxes

Rates, at least initially, are usually lower in suburbia.

Labor Supply

By 1975, suburban population will exceed city population in 14 of the 24 biggest industrial areas.

Transportation

Broad highways and plenty of parking space are the answer to expensive urban traffic congestion.

which personal contact with customers and communications are a vital factor. Advertising and credit agencies, business and engineering consultants, insurance, finance, to mention just a few industries, probably always will center in the city. And the downtown area is still regarded as best for the industries that typically locate in "districts," such as garment manufacturing, leather goods, and graphic and decorative arts.

According to a study made by Dr. Raymond Vernon and published by the Committee for Economic Development, the central cities will continue to thrive on office work. "They may not capture quite as high a proportion of such activity as they have in the past," says Dr. Vernon, "but there is not much doubt that absolute increases in such employment will occur."

But outside of that, Dr. Vernon believes that the future of the city is grim. "One sees only a growing obsolescence in the rest of the central city beyond its central business district," he says. "The outward movement of people will be matched by an outward movement of jobs. Retail trade will follow the population. Manufacturing and wholesaling establishments will continue to respond to obsolescence by looking for new quarters and by renting in structures in the suburban industrial areas where obsolescence is less advanced. The movement of jobs will reinforce the movement of residences."

Stemming the tide

Is there any chance the dismal process can be reversed? To a limited extent, the trend already has been arrested as companies have scanned the suburbs and found them not quite the blessing they first seemed to be. Particularly for office-type work, labor has often become a problem to companies locating outside the cities. Junior executives don't care to be cut off from their friends and business contacts, and office girls complain they have nothing to do during their lunch hour except eat. Some companies have checked over their slide rules and come to the conclusion that renovating their city plant or buying an old city building at bargain prices is still cheaper than building anew in the suburbs.

Also, a number of cities have been making a valiant effort to keep trade and industry from pulling out.

BEFORE AND AFTER: *Philadelphia, like many other cities, is banking on urban redevelopment programs to help keep industry and commerce from moving out to the suburbs. The Pennsylvania Railroad co-operated by removing the unsightly tracks (left) which ran down the center of Philadelphia's central business district. Modern office buildings and ample parking lots now occupy the reclaimed space.*

Many cities have embarked on long-range renewal programs, often sparked by business leadership, to clear blighted neighborhoods and reclaim land for residences and industry. Philadelphia is one example. Stung by the loss of 50,000 manufacturing jobs over the past few years, the city and the Chamber of Commerce each put up $75,000 to form the Philadelphia Industrial Development Corp. in the spring of 1958. Its object was to help companies acquire land, expand their plants, or obtain financing. Almost overnight, PIDC received more than a hundred requests for aid from companies in the city.

In cooperation with the city, PIDC has already succeeded in freeing about 700 acres of city-owned land for industrial development. Another 78 acres in Philadelphia's "skid row" have been certified as blighted and are now available for development. And there are about 5 million square feet of vacant loft space in the city that PIDC can buy, alter, and put back to work.

In New Haven, Conn, a total of six slum clearance and reclamation programs are being carried out. The two most advanced ones call for leveling a total of 128 acres of blighted land in the heart of the city and building new stores, apartment houses, and office buildings on the sites. Other programs are being developed to free land for industry, notably, the 348-acre Long Wharf project on the west side of New Haven harbor.

In Newark, N. J., a permanent Newark Economic Development Committee has been formed, composed of local business, banking, labor, and civic leaders to attract new industry to the city and to improve property. More than 200 acres of slum and blight in Newark have been cleared with Federal aid. Another 300 acres are in varying stages of the redevelopment process.

The aftermath—slums

Some 300 cities in all parts of the country now have urban renewal programs, and hundreds more are planning them. But it's unlikely that the tide to the suburbs will be stemmed. Nor is that the principal object of the renewal programs. Industry is expanding, and the renewal programs can't reclaim more than a fraction of the land that will be required. So the trend outward must continue. The problem is how to expand to the suburbs in an orderly fashion and not leave festering slums, blighted areas, and economic decay behind in the cities.

"The prospects are awesome," says Edward J. Logue, development administrator of the New Haven renewal program. "If present trends are allowed to continue, 30 million Americans will be living in slums by 1975. Further neglect of the cities now is going to cost taxpayers, individual and corporate, untold billions by then. Everybody will be talking about slums then—and everybody will be paying for them."

—JOHN CHRISTIE &
MELVIN J. GOLDBERG

THE FOLKLORE OF MANAGEMENT: II

The Myth of the Organization Chart

CLARENCE B. RANDALL

If your company is run "by the book," if the job description is more important than the man, if organization charts take precedence over the realities of personal relationships, your organization is in danger of succumbing to an all-too-common form of creeping paralysis, says business philosopher Clarence B. Randall. In this article, the second in his series on the folklore of management, the author exposes the perils of the organization-chart mentality and shows how they can be overcome.

WITH the passing of the years, I am impressed by how different management men and management ways are today from those of the pre-bellum days when I was lucky enough to get my first job.

Not that management itself is any different. It has the same function in any generation under the free enterprise system. Its task is to plan the operation, secure the maximum effort from those who are employed by the enterprise, and coordinate the activities of men and machines. Only the methods and the working tools of management change.

When I began, there were still men who worked ten hours a day at stand-up desks. They wore green eyeshades and had only kerosene lamps to see by. When electric lights first came in, the single unshaded bulb hanging from the ceiling was so dim that they often wished they had the lamps back.

The man in the alpaca suit

When these men arrived in the morning, they took off their coats and put on alpaca jackets to save the wear and tear on their sleeves. Most of them wore celluloid collars and celluloid cuffs that were attached to their shirts by metal clasps. Everyone that could had a mustache. They wrote with steel pens that were dipped in dirty ink wells. To preserve their correspondence, they made copies with a letter press and pasted the tissues in a large folio volume. Their telephone, when they had one, hung on a wall and had to be cranked by hand.

A dream of greatness

The boss, who was revered and feared as one who stood on the right hand of the Deity, was driven to work in the morning and taken home at night by a handsome team of horses and, in the summer, a surrey, in the winter, a cutter with jingling bells.

But among these strange characters were fine management men, some of the very best I have ever known. They dreamed great dreams and lived to see them come true. They turned out products in ever-increasing volume for a rapidly growing country. They made money and got ahead. They were the founding fathers of today's great industrial enterprises.

And all of this they did without benefit of organization charts.

Consider the modern counterparts of these earlier strong men.

For the most part, they now come to their executive responsibilities after many years of specialized training. Not only are they college graduates but they have also probably had graduate training at the Harvard Business School or some other fine institution. There they have studied accounting and merchandising and industrial engineering and have done case studies on all sorts of business problems. Their weakness is that, enamored of new methods and still of necessity lacking practical experience, they are prone to confuse the substance of management with its working tools. For example, they tend to disdain the use of the English language, which their forebears employed so pungently, and to adopt instead the representational means of communication. The chart thus takes on such importance in their minds that it becomes an achievement in itself instead of a means to an end.

And so to work

Upon graduation, these eager young men with highly polished minds arrive in industry on the dead run. They can hardly wait to put into practice the exciting new techniques which they have mastered. When they walk into the office at nine o'clock on any given morning, they are inclined to view the seemingly disorganized state of chaos about them with some disdain.

At heart, they are very good stuff indeed, and so they get ahead fast. It is not long before they receive substantial responsibility, and as they rise

in the organization, their yen for the formalities of management persists. When at last their big chance comes, and they are near the top, they surround themselves with staffs who have been similarly trained, and the stamp of the chart-minded executive is placed irrevocably upon the institution that they serve.

Many of these bright young men who make up these new staffs mark the full break with the bold entrepreneurs of the past. They do not want to become president; they are content always to remain staff. Each one of the green-eyeshade boys secretly nursed the hope that one day he could become boss and have his own spanking team of bays, but I am not sure about their successors. Some of them seem to me altogether too ready to stick with their charts if to get the chauffeur-driven Cadillac they must take the responsibility that goes with it.

Warm human relationships must not be put into cold storage. Essentially fluid situations must not be frozen.

It is not, of course, the new techniques themselves that I quarrel with, but rather the distorted sense of proportion with which they are employed by some of this new breed of management men. Graphs are fine in their place, but they are not sacrosanct. They should never be lifted above the dignity of useful working tools.

A chart, as such, is an excellent thing. Whatever clarifies thinking and brings a problem into sharp focus is a desirable medium of administration, but it is the beginning of the problem and not the solution. Decisions still have to be taken by an exercise of the will; the chart itself will not get things done.

There must be both selectivity and balanced judgment in the use of the modern management techniques, with choices made that are appropriate to the circumstances. Not all minds react to the same stimuli, for example, and there is no single means of communication which will transmit an idea to all persons with equal effectiveness.

Take blueprints. There is a time and a place for a sketch, but it can never replace the spoken or the written word for the simple reason that there are some men who can never fully comprehend a drawing, no matter how hard they try. The well-rounded management man will, therefore, be master of all the media and will use them appropriately. Above all, he will never forget that it is the idea and not the medium that is important.

There is a touch of sadism in all of us, and the particular form of petty cruelty which I used to delight in practicing was this: When a young engineer was admitted to my august presence, I would ask him a question that called for a reasoned reply. If he reached for a pad and pencil and began to draw, I rebuked him sharply and asked him to tell it to me in words. If he failed that test, I knew that for him ideas had to be expressed on a blueprint or they lacked validity, and doubts about his future rose in my mind. He seemed to be condemning himself to staff work for life.

When the chart is boss

The most virulent form of this mentality is found in those for whom the organization chart is the quintessence of management, the very end-all of industrial engineering.

In such companies, this imposing document, which is found in every desk and must be consulted frequently by all hands, is as long as the genealogical table of an old New England family and as complete to the smallest detail as the subject of nuclear fission in the *Encyclopedia Britannica*. For a man not to be squeezed into it somewhere would be a fate worse than death for it could only mean that he was completely unknown. To be connected to only one boss on the chart, and that but by a single line, would be an announcement of inferior status. The men who have really arrived will be spider-webbed off in several directions by mysterious cross-hatching.

Should an outsider chance to see the document and should he advance into the fine print of the job descriptions which will be attached to the chart, he would wonder whether any work is ever done at all, since so much time must obviously be required for study and meditation upon what to do next and how far to go.

Now, obviously, to know who is to do what and to establish authority and responsibility within an institution are the basic first principles of good administration, but this is a far cry from handing down immutable tablets of stone from the mountaintop. Not even the Ten Commandments undertook to do more than establish general guide lines of conduct. They contained no fine print and no explanatory notes. Even the Almighty expected us to use our own good judgment in carrying them out.

It is not the preparation of the organization chart that I condemn, but its abuse; this blowing up of its significance to the point where guidance ceases and inhibition sets in. When men turn to it occasionally for broad indications of where responsibility lies so that confusion may be avoided among personnel, all of whom are willing and able, its force is positive. But when men fall into the habit of using it to avoid a task, of saying a pleased "Not me!" to themselves when they consult it, then its force is negative.

Warm human relationships must not be put into cold storage. Situations that are essentially fluid must not be frozen.

Production is, above all else, team play. Before a football game, the varsity may study the sketch of a play which the coach has put on the blackboard, but they don't take the chart into the game with them. When the ball is snapped, if the tackle misses his man, the end gets him, no matter what the chart says.

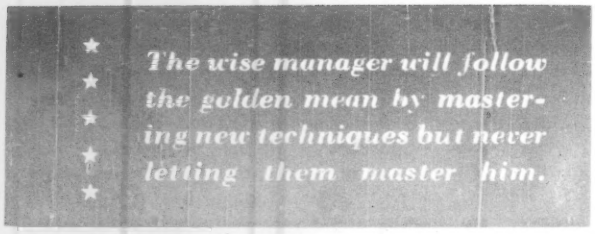
The organization chart is a useful scaffold with which to build a house, but it is not the house.

So it must be in business. Each man must have a sure instinct for adjusting his effort to that of the man alongside him so that the over-all objective of the operation will be advanced. He should look at the music when he can, but most of the time he must play by ear.

I remember how shocked I was once when I went to call on the Chicago representative of a large corpo-

ration whose main office was in the East. I was a vice president of my company at the time. He was not only a senior vice president of his company but a director as well. I felt entirely at ease in deciding for my company the question before us without even telling my boss that the problem existed. But when I put it to him, he opened his desk, took out a black book, thumbed the pages for a few minutes, and said, "No dice. Home office!" With complete complacency he simply dumped the matter on the desk of a remote boss because the book told him to. As a consequence, his company missed out on a matter of importance, for I had no intention whatever of going East to pursue it.

Good administration requires flexibility of both mind and method. The infinite variety of the changing pattern of circumstances that affect production and distribution demands it. The most precise organization chart that industrial engineers can draw will be out of date before it can be printed and handed round. A relationship which functions smoothly today may begin to show strain tomorrow because of a new development that could not have been foreseen. Men of good will who have broad understanding of what their jobs are intended to accomplish can make necessary daily adjustments when circumstances change, but there can be no slippage if the man is harnessed to a chart.



The man shapes the job

There is one further difficulty with over-emphasis on the formalizing of business relationships, which is this: A chart which suits one group of persons will need revision just as often as there are personnel changes.

Jobs have no vitality of their own. They are parasites. They attach themselves to people and cling tenaciously to particular individuals, no matter what we may do. Take the man away, and the job will never be quite the same again. A relationship which functions smoothly under a particular chart and one set of job descriptions, so long as the original incumbents remain, will begin to show stress when promotion, death, resignation, or retirement intervene. No two individuals will ever bring successively to one job the same complex of strengths and weaknesses, and when a new teammate arrives, some compensating adjustments must be made by those around him. No chart can ever do this for them.

The wise management man, therefore, will follow the golden mean in using the new techniques, mastering them but never letting them master him. He will add them to his kit of working tools but will keep them in their place.

He will remember that the organization chart is a useful scaffold with which to build a house but will know that it is not the house. END

Action Plan for Middle Management

Top management, even when chart-ridden, has at least the benefit of a high vantage point to view corporate problems. But middle management too often inhabits a comfortable shell that blocks off its vision and limits its opportunities. Here are twelve steps that can help the middle-management executive break out of this shell and release his full potential:

1. Get a longer perspective on overall company operations, then measure your job in relationship to the whole. Top management can and must make better distinctions and definitions in executive classification.

2. Get a longer look at the company's competitive position and determine whether you contribute a positive, neutral, or negative ingredient to the company's activities.

3. Get a longer look at the world situation and inform yourself of what is going on. It's easy to clip off the buried head of an ostrich.

4. Take a close look at your relation to top management and weigh the value of your contribution. Activate your ideas instead of justifying your actions, and let the results speak for you.

5. Take a close look at the road blocks to top management and determine whether they are real or imaginary. Most of them are optical illusions, the mirages of self-pity.

6. Take a close look at your departmental routines and measure their necessity and their need for improvement.

7. Examine your departmental personnel to see whether you are overlooking talent that could be given greater responsibility or promotion to another division. Test subordinate talent with new assignments and increased authority.

8. Examine the budget with a view to cutting costs in waste operations or waste space. But don't be afraid to ask for enough money to do your job effectively.

9. Examine salary lists with the idea of getting rid of deadwood and rewarding workers with a policy of quality control with quality rewards. Your executive talent includes effective leadership and recognition of talent.

10. Examine your conscience and capacity as to your aim in life. Don't waste sympathy along the grapevines. That's where misery loves company.

11. Justify yourself on results, not alibis. Excuses are only crutches for a lame effort. Mediocrity flourishes among the also-rans.

12. Take all the valid authority you can get and use it confidently. Don't be afraid of an honest error of judgment. Be blamed for the decision you made, never the one you avoided.

—A.M.S.

How to Pick Better Front-Line Managers

MILTON M. MANDELL

What kind of man makes the best first-line supervisor? Here's what the latest studies show.

Putting a bigger field of supervisory candidates over tougher testing hurdles yields the best results, companies find.

IF union stewards are running rings around the supervisors in your shop, the reason may be painfully simple: They're brainier. Take it with a pinch of salt if you like, but that's the evidence of at least one study. Add the experience of a manufacturer who found his stewards scored higher on supervisory job knowledge than the supervisors themselves, and you've got food for sober thought.

Even if your company isn't in this particular pickle—and chances are it's not—it will pay you to take a hard look at the caliber of your present front-line managers and the men you are picking to replace them as they move up or retire. For bad supervision is getting to be a luxury no company can afford.

Part of the bill shows up in the rising dollar costs of scrap losses, absenteeism, turnover, and grievances—all penalties of poor supervisory performance. But that's far from the whole story. When production methods are changing rapidly, as they are in many plants today, the so-called "brittle" supervisors, the men who consistently resist change, become a serious drag on company progress.

One approach to the problem has been through improved supervisory training. Companies are giving their foremen courses in human relations and other subjects ranging from rapid reading to political action, on the theory that it's just as worth while to make them broader human beings as it is to increase their technical competence.

At the same time, there is a growing realization of the payoff that comes from proper selection—picking the right supervisors to train in the first place.

What is a good supervisor? And how can a company find one?

Fortunately, enough research has been done in practical industrial situations to answer the first question with some authority. Industry is finding out what it needs, which is half the battle.

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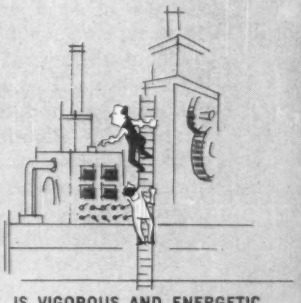
The top-flight supervisor . . .

GIVES CLEAR INSTRUCTIONS

IS AS GOOD AS HIS WORD

TELLS EMPLOYEES HOW THEY ARE DOING



IS VIGOROUS AND ENERGETIC

CAN TAKE CRITICISM

DOESN'T GET RATTLED EASILY

CONTROLS HIS TEMPER

HAS OUTSTANDING TECHNICAL KNOWLEDGE

Studies have been made at Lockheed Aircraft, Detroit Edison, Prudential Insurance, and other companies to compare the effect of different types of supervision on similar groups of employees doing much the same work. Essentially, these studies show, the supervisor's job is twofold: He must figure out how to meet the production demands of superiors and, *at the same time,* satisfy the employees' demands for a friendly, considerate boss. Supervisors who lead their employees rather than drive them usually turn out to be the real producers.

More specifically, a study of 153 first-level supervisors showed that the best of them had certain traits in common: They could and did give clear, intelligible instructions; their word was reliable; and they let their men know how they were doing. They were physically active and energetic. They didn't easily fly off the handle or get rattled in emergencies or by criticisms from a superior. And they were tops when it came to job knowledge and technical skill.

Finding a man with all these qualifications is far from easy, but companies are getting surprisingly good results simply by using more and better selection tools—which are available to any plant, large or small.

Widening the field

First, however, companies try to increase the statistical chances of success by getting a wider group of candidates to choose from. North American Aviation, Inc., for example, likes to have at least ten candidates for every supervisor job that opens up.

There are several ways to build up the number of candidates. Present supervisors can nominate them; so can the personnel department if it has the proper records. And employees can nominate themselves through a job-posting system.

Another way to widen the field is to take a good look at the job to be sure you aren't setting up more specifications for candidates than you need. Ask yourself: How much ambition and aggressiveness should the supervisor have? How persuasive must he be? Should he be a man who naturally does things at a rapid tempo, or will a slower type be adequate? How patient must he be? Will he be supervising young employees or employees who are not too bright? What does he have to know? How smart does he really have to be to do the job?

Every qualification you add on rules out a number of possible candidates right at the start and gives higher management less freedom of choice. The trick is to require the right qualifications for the job that is actually open—not for some imaginary job that will eventually lead to the presidency.

Choosing among many candidates is harder, of course, than picking the best man from two or three. It takes more time and costs more money. But it pays off in the end, many companies have found.

Methods do exist that will make the task easier. None of them will do the selection job by itself, but when taken together they can produce excellent results.

The first step in the actual selection is often a battery of psychological tests. These will eliminate some of the misfits at the start and save time later. Testing is, in fact, a comparatively inexpensive way of handling a larger group of candidates.

Moreover, the testing places the selection process on an objective basis and helps to convince candidates that the company intends to be fair and give everyone an equal chance, whether his supervisor nominates him or he nominates himself. The supervisor may be biased, but a test with a cut-off score developed from years of experience knows no favorites.

Most companies buy ready-made tests, but they need professional advice in selecting and using them. A typical battery includes an intelligence test and a supervisory knowledge test. Another comprises a test of reading comprehension or vocabulary, a mechanical comprehension and/or trade knowledge test, and a supervisory judgment test. Personality and interest tests should be given only if an industrial psychologist is available to evaluate the results.

Some companies develop their own "trade knowledge" tests and validate them by giving them to the current supervisory force. If the good supervisors get consistently better scores than the poor ones, it may be assumed that the test will be helpful in judging technical competence.

Weighting the facts

Larger companies have found a weighted application blank helpful. Such things as age, marital status, amount of education, number of dependents, and so on are matched against job performance to find out the "pattern" characteristic of the more successful supervisors. Research needed for this method can be expensive, but the results are often well worthwhile.

Relative test scores of those who pass the first hurdle are usually considered in the final selection, along with the other criteria. Tests may count for about 20 or 25 per cent of the final score. The reason for this is obvious. A supervisor has to "know the right answers," and he also has to have the skill to put them into practice.

Companies have found a written rating on a printed form by a man's immediate supervisor to be inaccurate in many cases. Wisconsin Electric Company says such ratings are "as primitive as a chunk of buffalo tallow compared to a thermometer." General Electric points out that the same words may mean different things to

Pitfalls in Picking Supervisors

Experience has shown these are the most common mistakes in supervisory selection:

1. Promoting the good technician who lacks human relations skills and interests.

2. Promoting the dependable man who lacks initiative.

3. Promoting the best man in a unit, even if he's a mediocrity, and neglecting to look at potential candidates from other units.

4. Promoting the man whose only real qualification is his skill at apple polishing.

5. Promoting as a reward for faithful service rather than for ability. (There are better ways of rewarding a loyal man than putting him in the wrong job.)

MILTON M. MANDELL, *a recognized authority in the field, has assisted industrial organizations in management selection, development, and appraisal and has prepared, installed, and administered a variety of personnel testing and selection programs. His articles on personnel practices have appeared in many publications including* DUN'S REVIEW, *and he is the author of several books on selection and interviewing.*

different people—hence what appears to be a high rating may actually be a low one—and vice versa.

More serious is the danger in accepting such ratings at face value. As Guy W. Wadsworth, Jr., of Southern California Gas points out, "low-grade supervisors tend to attract and favor lower-grade men." Research in Navy establishments show that the supervisors who go easy in their appraisals are likely to be those who are near retirement and haven't made much progress. Tough raters are young, ambitious, and on their way up.

A written rating by an employee's immediate superior is valuable if the rater has high standards, if he has the necessary information on which to base his judgments, if he's honest, if he's good at sizing up people, and if he is able to keep in mind the differences between supervisory and non-supervisory jobs. But not too many of today's supervisors meet those standards. Many of them would rather be "good Joes" than do a good selection job. That's why it's better to get the information by talking than by using written forms and to get reasons for opinions as well as the opinions themselves.

A bigger panel of judges

The newer trend, moreover, is to bring more members of management into the act and not leave selection up to the man under whom the new supervisor will work. At least two, and often three, interviewers are used, and sometimes there are two sets of interviewers. Interviewers are picked for their wide experience in the organization. They are trained in interviewing and in job requirements. They analyze the test and appraisal results before they meet the candidates. All of this minimizes the danger of misjudgement in the interview itself. Because interviewing seems so simple, executives often forget that it involves making extensive inferences from limited data obtained in an artificial situation.

A newer type of interview is the "group oral," in which candidates are brought together and given a problem to discuss while management watches them perform. If the question presented is a "hot" one on which people are apt to have strong opinions pro and con, candidates will forget they are being rated and act naturally. Then the session will indicate how clearly they can explain their viewpoints, how they take criticism, how effective each one is in a group situation. The group test also allows raters to observe up to six applicants in about an hour.

Often, top plant management takes part in the interviews of first-line supervisors. At the Armstrong Cork Company, for example, finalists are interviewed as a group by the plant manager, the assistant plant manager, the plant personnel manager, and other executives. The plant manager and his assistant and the production manager make the final selection.

What management needs to know

The various interviews, evaluations, and tests are designed to bring out answers to the following questions that top management asks about potential supervisors:

- Do the other employees like him and respect him?
- Does he get flustered by changes in work methods or new problems?
- Is he cooperative?
- Does he get along with people, or is he a lone wolf?
- Is he interested in technical problems only, or does he show interest in management problems, too?
- Does he want responsibility? But is he so ambitious that he will become a "yes" man to his bosses and a tyrant to his subordinates?
- Does he keep his head in an emergency?
- Is he healthy and active? Does he do a full day's work?
- Does he keep up with the latest developments in his field?
- Does he make suggestions for work improvement?
- Does he prepare himself for advancement?
- Can he take criticism?
- Does he work well under pressure?
- How good is his judgment about people and non-technical problems? Is he objective?

An employee who rates high on at least ten of these fourteen factors should be a good bet.

Some companies, notably North American Aviation, take the most direct method of getting the answer to the first question: Do other employees like him and respect him? Co-workers are asked about a potential leadman's job knowledge, job performance, cooperation, and teaching ability, and for an over-all appraisal of him.

Co-workers concur

"Almost invariably," a North American executive remarked at a recent meeting, "I've found co-workers rate much as a man's supervisors do. About the only difference is on the factors of 'initiative' and 'drive.' On other factors, supervisors and co-workers go right down the line together."

Supervisory selection programs have reached maturity. Top management isn't looking for gimmicks. It knows that good selection is costly, but pays off in profits for every dollar wisely invested. END

How Good Is Your Selection Program?

Do you have a good supervisory selection program? If you can answer "yes" to the following six questions, chances are you're getting effective supervisors:

1. Is there good intake at the bottom to insure that there are enough rank-and-file employees with supervisory potential to meet your needs?
2. Have realistic qualifications been set up on the basis of real job needs?
3. Do you have at least seven candidates for each vacancy?
4. Do you use several different types of selection methods: tests, appraisals, and interviews by more than one trained interviewer?
5. Does top management participate through the committee approach in setting standards, interpreting the information gathered about the candidates, and selecting men?
6. Has as much research as possible been done by qualified psychologists on job requirements, selection methods, and standards?

These steps cost money, but ineffective supervision costs more.

Boosting Sales with Faster Delivery

WHAT is it that business men denounce in public but always accept in private? If "payola" comes to mind, you're dead wrong. The answer to this conundrum is "the rush order"—that demon that raises blood pressure—and often lowers profits.

Rush orders are increasing to such an extent that many executives have decided to stop denouncing them and accept them systematically as part of the new way of commercial life.

Rush orders, of course, are nothing new. But the latest recession seems to have pushed companies to a new high level of "rush" business. Short of capital during the downturn, many manufacturers drastically cut inventories of production parts and spare parts, and distributors and retailers cut their stocks of finished goods. Although inventory levels have risen steadily since 1958, many companies either have not yet returned to their former levels or have found that they can live on a leaner diet.

Either alternative means that the company is frequently caught with bare cupboards. And this means more "rush" orders for suppliers, who, in effect, are being asked to maintain customers' inventories.

This increasing volume of rush orders is posing a real problem for many manufacturers and distributors. Often, such orders are filled at a loss because they disrupt normal operations and eat up profits. Yet turning them down is unthinkable.

Making rush orders routine

The solution for an increasing number of companies is to organize the latest equipment in communications, data processing, and transportation into systems that can handle rush orders in a routine, profitable fashion. When these systems are running smoothly, companies have been pleased to discover that they can also get along on lower inventories. For example, because of its new faster order-handling system, the Raytheon Manufacturing Company of Waltham, Mass., has cut its inventory of distributor items from $5 million to $3 million. Since maintaining a million dollars in inventory costs at least $50,000 a year, this means a saving of $100,000 annually.

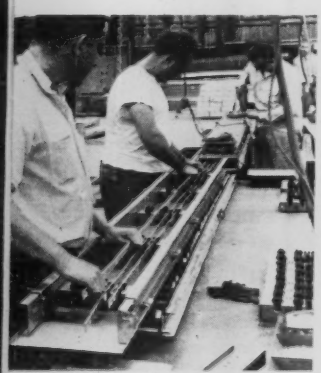
Achieving fast delivery at the same or lower costs usually involves the integration of several plant and office operations.

In some cases, manufacturers are designing products for rapid assembly. When it is impossible to assemble products overnight or away from the plant, companies are using computers or manual systems to predict production requirements and inventory levels.

Rapid communication systems linking dealers, sales offices, and order-processing centers are helping to speed orders through the plant, and fast transportation by the most economical means gets the goods to customers in a hurry. Once a company has installed a "fast delivery" system, advertising and promotion are used to promote it and to generate enough volume to make it profitable.

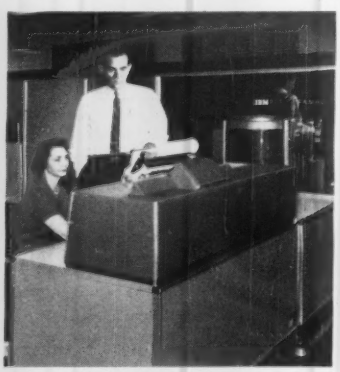
The Federal Pacific Electric Company, Newark, N.J., is a good example of a company that has redesigned its product with fast delivery in mind. FPE has developed a "modular" design for electric control panels, a custom item that is normally delivered in from one to six weeks after receipt of the order. The company is able to deliver in one to three days because the comparatively small number of "erector-set" parts necessary to assemble an enormous variety of panelboards are stocked at nine strategically located warehouses.

Eight ways to turn rush-



Rapid Assembly

Custom-made electric control panels can be delivered in from one to three days by Federal Pacific Electric from nine strategically located warehouses. The secret is modular design.

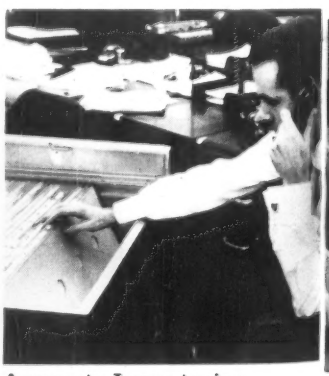


Prediction of Production

At Pease Woodwork Company, an IBM Ramac 305 predicts production schedules so accurately that all the parts for an enormous variety of pre-fabricated homes are available off-the-shelf for delivery on just 24 hours' notice.

Rapid Communications

Many companies, such as Clark Equipment, are turning to nationwide leased lines to transmit orders in minutes from far-flung dealers and sales offices. These systems are also handy for arranging profitable "swaps" between dealers.



Accurate Inventories

Although computers with vast "memories" are doing more inventory jobs, many companies, such as Emerson Electric, find visual records efficient. These inventory forms are updated daily.

The Wilmot Castle Company, Rochester, N.Y., provides an outstanding example of computer prediction of production requirements. This manufacturer of medical, dental, and hospital equipment uses an IBM Ramac 305 to predict, on the basis of past sales, how many of each of its 15,000 products should be made. As soon as the level of finished inventory falls below a predetermined point, the computer calculates the most economical quantity of material to manufacture or buy. Of course, this system means not only that finished inventory will be on hand to meet normal and rush orders promptly but that in-process inventory levels are cut—a considerable saving in capital.

All tied up

Any number of companies have installed nationwide leased-line communication systems between distributors, sales offices, and warehouses. One of the most advanced is being set up by Raytheon. For some time now, Raytheon has included a prepunched reorder card in each package of five units of tubes, diodes, or transistors sent to distributors. When the last unit is sold, the dealer mails the card back to Raytheon. Now, Western Union is installing in each Raytheon sales office and distributor headquarters special equipment that accepts these cards and instantaneously relays reorders to Raytheon's single distribution center in Westwood, Mass.

Order processing, which used to be a matter of days in some companies, is now a matter of minutes when automatic data-processing equipment is employed. For example, Clark Equipment Company, Buchanan, Mich., uses a Ramac 305 for order processing, as well as for maintaining inventory. Rush orders can be on their way only 30 minutes after receipt.

A computer with magnetic memory has tremendous application in maintaining inventory information. Certified Grocers of California, Ltd., uses *two* Burroughs 205's to keep track of 18,000 items, as well as to bill dealers.

Where the order processing takes place some distance from the warehouse, various electronic devices such as Teletype, facsimile, and closed-circuit TV have been applied to replace mailing. For example, processed orders are carried by teletypewriter between Homelite's sales headquarters in Port Chester, N.Y., and its warehouse in Gastonia, N.C.

For most companies, the increased volume of rush orders requires greater reliance on fast carriers. This generally calls for more air express, air parcel post, and air freight.

However, Westinghouse Electric Corp., has cut back on air service on fast deliveries. By making improvements in all the steps before shipment, Westinghouse has saved so much time it can forgo costlier air service. Westinghouse also reports that ground carriers are now offering faster service.

Organizing an efficient fast-delivery system calls for a considerable expenditure of time and money. Many of the companies that have made the attempt report that they underestimated the effort required. Some have made and are still making expensive revisions in their systems.

What it means to business

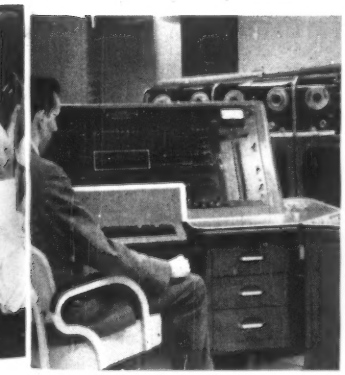
Faster delivery will have a number of results in American business life:

- Distributors and retailers will be able to carry lower inventories.
- Manufacturers may be tempted to eliminate distributors and deal directly with the ultimate customers.
- Some smaller distributors who don't do enough business to justify leased lines may be dropped.
- Smaller, regional manufacturers who have relied on lower transportation costs and quicker delivery to gain a market will be pressed more by big national manufacturers.
- Manufacturers will tend to consolidate warehousing, and will carry smaller component parts inventories.
- Fast delivery will act as a counterweight to the general trend toward longer lead time needed for more specialized, more complex equipment.
- Many companies that cannot afford a computer just for accounting may now be able to justify it as a means for inventory control.

Fast delivery is part of the increasing tempo of American business life. And for companies that are reluctant to beat out competition on the price level, it offers a potent selling point.

MELVIN MANDELL

order headaches into profits



Fast Order Processing

At the Pittsburgh Plate Glass Company, a Univac handles in minutes three of the steps in fast delivery of parts—production prediction, inventory control, and order processing.

Fast Transmission of Orders

When the order-processing center is some distance from the warehouse, electronics help save time. Homelite uses teletypewriters over a leased line to transmit processed orders from Port Chester, N.Y. to its North Carolina warehouse.

Quick Order Picking

Once the order is in the warehouse, valuable time can be lost locating the goods. Raytheon mounts its entire stock on these easy-to-reach racks, which are loaded from the rear. Another distributor has provided roller skates for order pickers!

Fast Shipment

Companies are relying more and more on air and other fast carriers such as overnight bus to move rush orders. By depending on jet service, Raytheon needs only one U.S. warehouse.

Needed:

Better Business "Ambassadors"

HARLAN CLEVELAND

A revealing 646-company survey spotlights glaring weaknesses in the human relations skills of America's business envoys.

To earn a lasting welcome in foreign lands, U.S. companies must share the high cost of social progress.

The specter of nationalization makes political know-how a must for the American business man abroad.

THE AMERICAN geologist was just finishing his dessert, served up from the galley of the houseboat in a river of Burma's Irrawaddy Delta, when the first shot split the evening silence. He and his fellow technicians hit the deck in tangled confusion. Moments later, the firing ceased, and the men righted their coffee cups, dismissing the rude interruption as just another hazard of doing business abroad. It wasn't the first time the American, operating under a contract between his American company and the Burmese Government to explore the Delta for oil structures, had been caught in the continuing crossfire among the several groups contending for political power in that divided land.

Not all America's overseas business men have quite so exciting a time. But a broad survey made by Syracuse University of 646 U.S. companies operating around the world confirms that American private enterprise is still enterprising—even if, in an era of government contracts, it is no longer so private.

The American accountant figuring the overhead for a Japanese supplier, the engineer crash-landing his plane near an Asian village damaged by earthquake, the salesman exploring the night life of Mexico City with a valued customer, the lawyer writing up a licensing agreement with a European concern to avoid the Common Market's tariff barrier, the oil executive trying to tell his Iranian boss that in a modern organization the head man doesn't personally open all the mail—these and upwards of 25,000 other American enterprisers live and work abroad, searching for new business or managing established sources of profits for American investors.

"The customer is always right" is an old slogan in American business life. But now that the customer is the world, the old question, "May I help you, sir?" is likely to elicit a startlingly direct response: "Yes, you may if you split your profits with me, if you hire and train the citizens of my country to work in your company, if you help develop the health, sanitation, housing, and educational facilities in my country, and if you generally behave as a responsible citizen when you come to do business with us!"

This strings-attached welcome points up the radical change that the whole climate of American overseas business has undergone in less than a generation. Foreign markets are limited now by enforceable government regulations. Rising nationalism and suspicion of foreigners make it

PARTNERS IN PROGRESS: *Training the local labor force to use the tools and the skills of modern industry is a responsibility U. S. companies must assume in order to prosper abroad and to overcome nationalistic objections. Here an American supervisor checks the work of a turbaned Arabian-American Oil Company employee.*

COMMUNITY RELATIONS ABROAD: *American companies are spending billions to finance such community services as this modern hospital built at Cartavio, Peru, by W. R. Grace & Company for its local employees and their families. Providing housing, schools, and medical care for the local populace often costs more than direct wages.*

harder than ever to avoid or influence the regulation of your business by the local government. And the threat of nationalization is never further off than the next change in political leadership.

For these reasons, the men who produce and distribute oil, mine copper, grow rubber, sell and install machinery, establish retail outlets, or buy handicrafts for the American market find they cannot do business in foreign countries without engaging in vigorous and expensive programs of community relations.

The investment that now goes into community relations overseas is huge. Between 3 and 4 per cent of all overseas personnel of American businesses are engaged primarily in community relations work, and percentages are even higher in the less-developed areas. The true proportion may be much greater. As one wise overseas manager put it, "All our men are in the community relations business—but we also have to make a profit."

The Arabian-American Oil Company, which operates in Saudi Arabia, normally has between 60 and 70 Americans in its Government Relations Department—men who speak Arabic and who live throughout the country, dealing with Saudi officials at every level. Aramco, in fact, maintains in Cairo an office whose task, according to one staff member, is to convince Arab leaders everywhere that Aramco is an expression of Arab nationalism. Most other big companies have public relations people overseas, although for obvious reasons the trend is toward giving that responsible job to a qualified local national rather than to an American. Most companies, however, still prefer to make government relations a function of each line executive, rather than staff specialists.

But the job of getting along with hotly self-conscious nationalists requires more than a vigorous public relations program. It often means that an American company has to provide social services on a large scale—building workers' housing, running hospitals, schools, and commissaries, and generally becoming the "patron," a benefactor who is expected to care for all the needs of each member of every employee's family. This kind of paternalism can become very expensive. Casa Grace in Peru estimates that its paid cash wages amount to only 40 per cent of its total labor cost, and Creole Petroleum in Venezuela figures its total cost per laborer at three times the man's wages.

The trouble with paternalism is that once a company starts running a whole community, it cannot easily extricate itself: the more given, the more expected.

Many American companies, faced with the mounting price of their own paternalism, are now making serious efforts to pull out of the social-service business. This is more than a matter of cost accounting. Those companies which consider themselves to be in overseas business for the long pull realize that the long-term interests of the host country will hardly be advanced by a system which eliminates individual initiative and fails to develop voluntary group action in solving community problems.

Gradually, therefore, they are introducing new techniques of management into their company camps. The Syracuse survey shows that companies are contracting out many of these services to local business men capable of handling them. Rather than build homes in tediously uniform styles and assign them to employees according to rank and family size, assistance is often offered in the form of housing loans to be used by the individual to build a house to his own liking. Without taking away any of the privileges previously granted, companies are redirecting their programs with the hope that eventually the essential community services will be self-supporting and self-generating. It is a slow and painful process.

A most important part of the effort to build good community relations

HARLAN CLEVELAND, *Dean of the Maxwell Graduate School of Citizenship and Public Affairs at Syracuse University, is a former editor and foreign aid administrator. This article is based on a study made by Dean Cleveland and his Syracuse associates. The full report is soon to be published by the McGraw-Hill Book Company under the title,* The Overseas Americans.

abroad is the creation of a skilled and creative local labor force. The savings from training and promoting local people are large and are to be counted not only in money but in political currency as well. To get along with self-conscious nationalists, the American concern must look as "indigenous" as possible. In both India and Japan, for example, the aim of the Standard Vacuum Oil Company is to eliminate all (India) or virtually all (Japan) the American supervisors and executives. To be heavily staffed with foreigners in an overseas business is to invite constant identification as a "foreign company" and suffer the slings and arrows of rising nationalism.

The Syracuse survey found that the proportion of United States citizens to total employment in American overseas concerns is lowest in the highly industrialized countries and highest in the least developed countries. If we classify Asia and Africa as underdeveloped, Latin America as semi-developed, and Canada and Europe as developed, the ratios of American to foreign personnel can be summarized like this:

Underdeveloped regions . . 1 to 29
Semi-developed regions . . 1 to 47
Developed regions . . . . . 1 to 107

Although most countries now require by law that the number of foreign staff be held within a certain percentage of the total, the large and successful American companies working abroad are safely below the legal requirements. W. R. Grace & Company, operating in South America, says, "In most countries, the law compels a company to employ at least 85 per cent nationals; . . . we employ 98.6 per cent nationals and only 1.4 per cent Americans and Europeans in all of our Latin American operations."

Training local labor

The company which tries to create a skilled labor force where it did not exist is faced, of course, with basic problems of education and social outlook. In South America, for instance, the difficulties encountered in developing workers and local supervisors are everywhere the same: lack of education, lack of initiative, a reluctance to assume responsibility.

When looking for middle-grade managerial talent, many companies have run into inelastic social structures, deep-seated inter-personal rivalries and suspicions, and a concept of work as a means of reaching the point where you no longer have to work.

Not every American business man going into overseas service today can count on being supervised only by other Americans. The policy of promoting local nationals often forces the American to adjust to the fact that he may some day be taking orders from someone of a different nationality, background, education, and (in Asia and Africa) race. Moreover, an American may find himself abroad as a representative of his company's interest in a joint venture or as part of a multi-national executive unit, such as the consortium which now manages the production of oil in Iran. Such an American is continually being tested on his ability to be patient in the face of frustration, to convince others in their idiom rather than his own.

The new conditions of work for U.S. overseas business require a new kind of American business man. He must still know his business, but nowadays he has to know a great deal more. Now that he is no longer dealing *with* but *inside* other countries, some special kinds of sensitivity are at a premium.

Certain qualities of mind and spirit which best equip Americans for overseas assignments are pinpointed in the Syracuse study. These qualities are not alone the requirements for successful business abroad. They are equally needed by Americans who work overseas for Government agen-

Moral for Management

If you are thinking about going into business overseas or starting a review of the overseas operations you already have, the experience of the most successful U.S. companies abroad is worth pondering. In capsule form, the lessons from postwar experience are these:

1. Nationalism and strong governmental participation in business are worldwide trends. They are here to stay. Instead of complaining about them, find ways to work with them. Unless your company becomes an expression of the universal urge for "modernization" and a symbol of nationalist aspirations, you won't be in foreign operations for long.
2. In this era of rapid change, the political "ins" are everywhere on their way out. Don't get so tied up with the momentary powers that be that your business cannot survive their defeat, exile, assassination. Always ask yourself, "Will our company be able to get along with the *next* government, too?"
3. The chief limitation on your overseas operations will not be capital, but your skill in building an effective organization consisting largely of non-Americans—and your training of the few Americans and the many local nationals to man it. The success of the Americans you send over to do the job can be strictly measured by their ability to work themselves out of a job by training their local successors.
4. Paternalism is a bottomless pit. Think of your company as a focus for development of more individual enterprise on the part of your suppliers, your dealers, and your subcontractors. Help your employees to own their own homes and to regard themselves as independent folk rather than dependents attached for life to your largesse.
5. An American company's outstanding trademark, for better or worse, is the competence and conduct of its American employees and the way they act in relation to the foreign nationals. The money spent training and educating your employees to behave properly is well worth it if it prevents you from being thrown out of the country altogether.
6. With these attitudes, you can often make more profit, do more for world peace and prosperity, and have a more interesting time of it in overseas business than you could by an equivalent expansion of your business in the United States.

Not for talking through

WHEREVER YOU GO in New York State today, you'll hear talk that makes sense . . . to people interested in new and better job opportunities, to executives interested in greater opportunities for industrial growth. It's the kind of direct, "hard-hat" talk you'd expect from Governor Nelson Rockefeller's new team of business and professional men in government.

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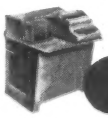

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cies, missionary societies, and voluntary relief agencies. They seem to hold true regardless of the kind of work the American is doing or in what foreign country he is doing it.

First, the American needs *an adaptable technical skill*—the versatility and willingness to improvise that imply both a thorough grounding in his technical field and an attitude toward it of a general practitioner rather than a specialist.

Second, he needs to have a strong *belief in his own mission*—a dedication to his work that enables him to survive repeated frustrations and still retain a zest for the job.

Third, he should have the quality of *cultural empathy*—the curiosity to study and the skill to perceive the inner logic and coherence of the other fellow's way of thinking, and the restraint not to judge it as bad just because it is different.

Fourth, he needs a *sense for politics*—the sensitivity to see himself as a "political man" whose action (or inaction) affects the power structure around him; the ability to relax despite being the object of curiosity, envy, and opprobrium; and the understanding of his own civilization that qualifies him to represent not only himself but the culture and society from which he comes.

Fifth, he should have *organization ability* — an unusual tolerance for large-scale organization and for the special complications of headquarters-field relationships; and the special talent for working himself out of a job by building social institutions and teaching others to manage them.

Finding the proper "mix"

No one individual can be expected to possess just the proper "mix" of all these ingredients. But every organization which operates abroad can be guided by these qualifications in trying to locate the proper people to mix together in carrying out its task.

The American business representative needs these special skills as much as any other overseas worker. But as things now stand, he is the least likely to have benefited from systematic training for overseas service.

True, some 40 colleges and business schools offer special courses of study in foreign trade. The American Management Association runs three- to five-day seminars for executives who are interested in overseas administration. The Business Council for International Understanding has arranged with American University to give short courses to business men heading for work abroad, and Business International offers both consulting service and seminars for executives of overseas businesses. But these programs, important as they are if viewed as first wobbly steps in the right direction, are hardly yet a serious effort to equip American business men with the kit of intellectual tools they need to operate in a nationalistic world.

The business school efforts are mostly helpful in improving technical skill. As for the short-term programs, it is doubtful that the practical business executive can be successfully introduced to cultural anthropology, American civilization, political analysis, comparative administration, and the necessary foreign language in a cram course lasting a few weeks at most. Only in language training, where the Berlitz schools are widely used, does the orientation of American business men for overseas service seem to be getting really professional, long-range thinking.

Roots of the problem

Part of the reason for this sorry state of affairs is that many businesses do not regard overseas work as a career within the company and thus do not acknowledge the need to train their people especially for such work. Outside of the International Department, moreover, the executives of some companies have strong doubts that cultural anthropology and political science are suitable studies for a two-fisted business man. There is, finally, the widespread conviction in the business community that "a good man at home is a good man abroad." This is a comfortable notion. The trouble is, it's wrong.

The fact that American business does so little to train its own overseas people—far less than is done by the mission boards and by most Government agencies—would not be so serious if the graduates of American schools could be presumed to have been exposed to the study of alien cultures and of comparative politics and administration. But U.S. colleges and universities are simply not providing a pool of Americans who, in addition to their vocational skill, have the understanding and the attitudes necessary to survival in overseas service. Many of them do survive, and some perform brilliantly. But in most companies, these successes are chalked up in spite of, not because of, the methods of overseas training now in vogue. It is not unfair to say that most of the weeding out of misfits and most of the relevant training for overseas service now takes place on the job. It is a wasteful arrangement, and we can afford to do much better.

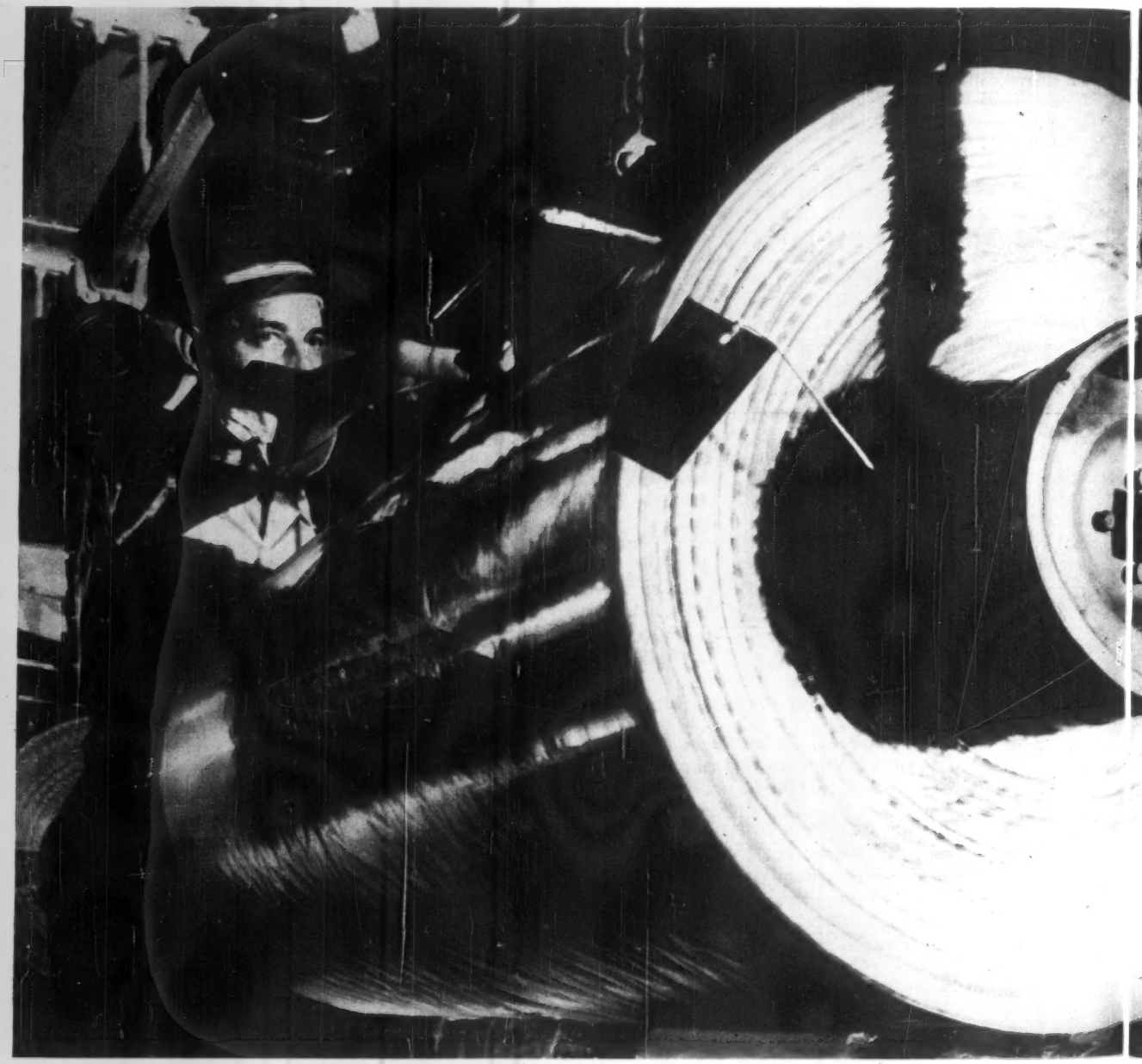
Since a few days or weeks of "orientation" cannot compensate for years of educational neglect, the best way to improve the performance of our overseas business men is to catch them young, while they are still subject to the processes of formal education. This means that the main job of overseas training will have to be done by the colleges and universities. But the rate at which our great decentralized system of public and private education rises to the new challenge depends on who prods it, in what direction, with how sharp a stick. Since American business has an immediate interest to be served, it is logical to look to business leaders for prodding action.

What business can do

Concretely, they can do these things:

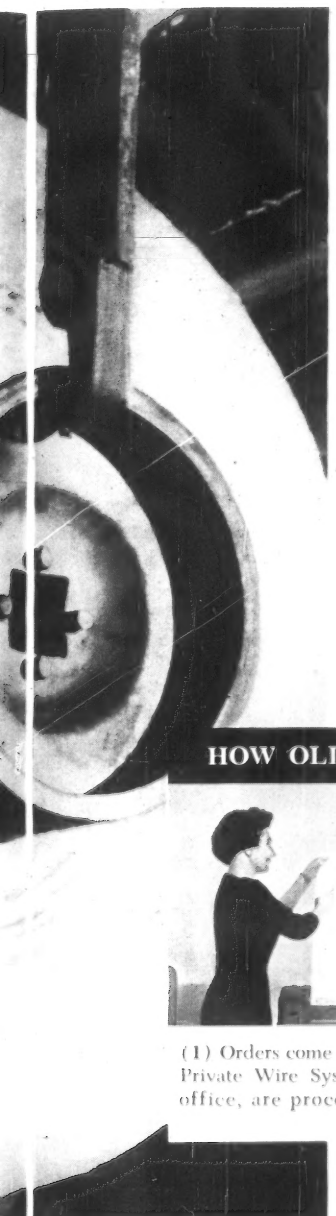
- Enable universities to become training stations for overseas service by insisting that applicants for overseas jobs be tested first in a university training program;
- Recognize the advantages of mixing their overseas personnel with those from Government and private voluntary agencies in common training programs;
- Allocate enough time (measured in months, not in days or weeks) for study of and exposure to alien cultures, political systems, and administrative workways;
- Insist on area knowledge and language facility as qualifications for overseas jobs;
- Encourage and promote those junior executives in overseas work who demonstrate a talent for training local personnel and thus working themselves out of a job; and
- Sponsor some serious research about their own foreign business experience in order to provide teaching materials for use in overseas training programs, and gradually to develop some tested general principles about cross-cultural operations that will prevent us all from making the same mistakes over and over again. END

PROBLEM: to provide 146 Olin Mathieson facilities with instant management communication



SOLUTION:

A Western Union Private Wire System



A 31-STATE NETWORK of offices and plants linked instantaneously . . . *in writing*. That's the job an ultramodern private wire system is doing for Olin Mathieson. Designed, built, and serviced by Western Union engineers, its 15,000 miles of circuits handle nearly 2,700 messages every day . . . faster, more efficiently, and *always* in writing!

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OVER-ALL RESULTS? Better service to everyone doing business with Olin Mathieson. More efficient administrative control over all 146 Olin Mathieson plants and offices.

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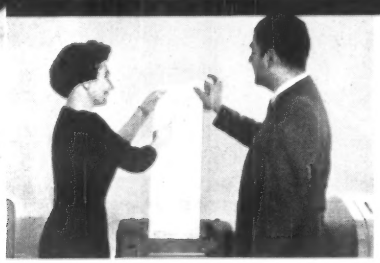
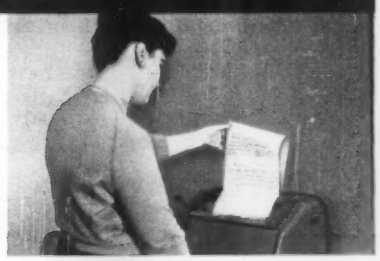
HOW OLIN MATHIESON CUTS ORDER-HANDLING TIME FROM 3 DAYS TO ONE!

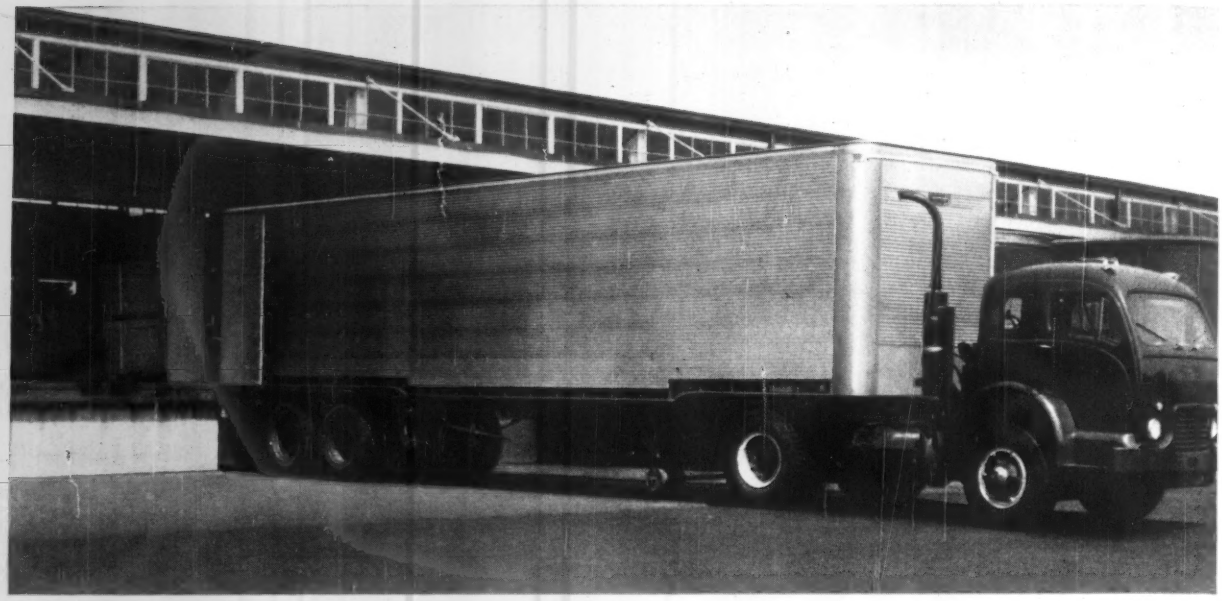


(1) Orders come in by Western Union Private Wire System to district sales office, are processed and checked.

(2) District sales office transmits orders directly to the Olin Mathieson manufacturing plant via PWS.



(3) Plant receives order on multi-carbon form for processing. Customer receives confirmation within 24 hours.



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Exploiting the Oceans:

Industry's Next Frontier

AS flights into space become routine in the next decade, the nation may turn in another direction for the next great research frontier—and new multi-billion dollar marketing opportunities. Close at hand, but still largely out of reach, the depths of earth's oceans are in many ways more of a mystery than outer space.

The coming drive to plumb the oceans' secrets will mean a great new source of profits for industry. As the navies of the world slowly submerge, demand for equipment that can function under water will burgeon. As the industrial nations exhaust many of the natural resources of the land surface, submarine "miners" will increasingly exploit the incredible mineral wealth of the oceans. And as the world's population expands beyond the capacity of arable land to feed it, the sea will become a critically important source of edible flora and fauna.

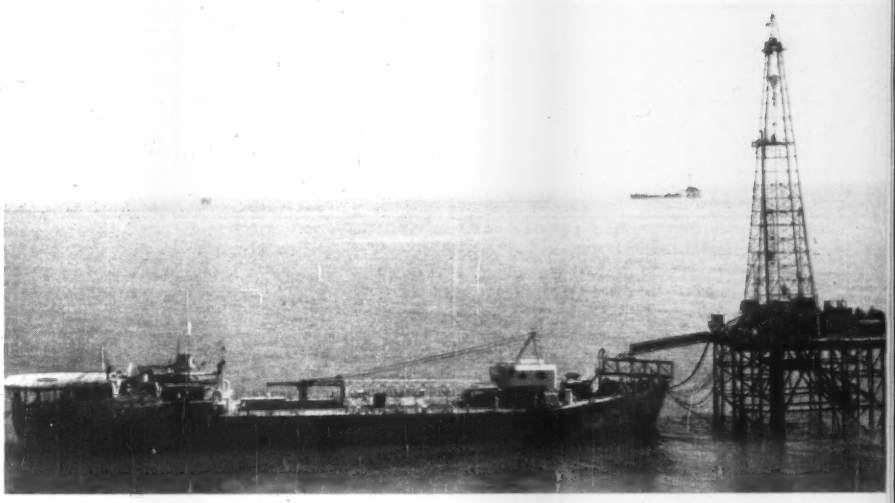
Research and commercial interest in the oceans isn't new, of course. Ever since ships started sailing out of sight of land, men have been trying to devise more efficient ways of ocean travel. And the lure of riches from the sea goes back to prehistoric times.

Wealth beneath the waves

The great growth of submerged travel in this century and the idea of using the oceans as a burial place for sealed drums of radioactive wastes has emphasized the three-dimensional nature of oceanography.

To date, of course, underwater travel has been exclusively military. But recent explorations beneath the polar ice cap have raised commercial possibilities. For example, the route between England and Japan under the ice cap is 5,000 miles shorter than present trade routes. Scientists are already kicking around the idea of nuclear submarine "freight trains" operating under the ice cap.

Since prehistoric times, mankind has been "mining" salt from the sea. The crude ancient evaporation methods are still employed in India. But modern technology has made great strides in mining the oceans. Today, magnesium and bromine are extracted from seawater, and sulfur and oil are brought up from the ocean bottom. Both these technologies may be developed to extract other minerals as the best deposits on land are used up.



MINING FOR MINERALS? *Some day, offshore rigs like this one may be used to mine the ocean bottom's massive deposits of valuable minerals. Developed to drill for offshore oil, the equipment has already been applied to mining of undersea sulfur deposits.*

Over the next fifteen years, the United States is planning to build 45 nuclear-powered submarines of the George Washington class. Larger than many World War II cruisers, these giant undersea missile launchers each cost more than $100 million.

Defense markets growing

Obviously, the underwater and anti-submarine defense effort represents a substantial market for industry. In addition to the companies now in the field, new ones are being continually organized. For example, the Grumman Aircraft Engineering Corp. is studying underwater instrumentation; Avien, Inc., Woodside, N.Y., has just set up a "Department of Undersea Technology" (see photo); and two scientists recently organized Underwater Systems, Inc. in Wheaton, Md. When the proposed National Academy of Sciences budget of about $900 million for deep-sea research (over ten years) is thrown into the balance, it is obvious that industry already has a sizable undersea market.

Even now oceanographic research is creating a market for special equipment and materials. For example, each of the specially constructed oceanographic vessels of leading maritime powers already at sea (more are on the way) is equipped with many tons of special steel products such as high-strength wire.

Producers of other metals are also hoping to gain a share of the seagoing market. The Aluminum Company of America spends $500,000 a year testing aluminum alloys for resistance to sea water and spray, and International Nickel Company maintains two similar test stations on the North Carolina coast.

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their construction are considering adding living quarters for the scientists' families. These scientific vessels are often away from home for six months to two years.

Room also has to be made for the unusual new instruments developed to explore the ocean bottom. For example, scientists would like to lower a TV camera and bright lights into the oceans' seven-mile-deep holes. A manned U.S. Navy "bathyscaph" has also been built to be lowered to these incredible depths. Recently, two scientists descended 37,500 feet to the floor of the Pacific Ocean in it.

Commercial benefits to come

Although the objective of the oceanographers is more scientific knowledge of the ocean and the ocean floor, commercial benefits are sure to follow. For example, oceanographers may some day be able to predict shifts in ocean currents like the one that is driving salmon farther out to sea away from our coasts, to the detriment of American fishing fleets and to the benefit of Russia and Japan.

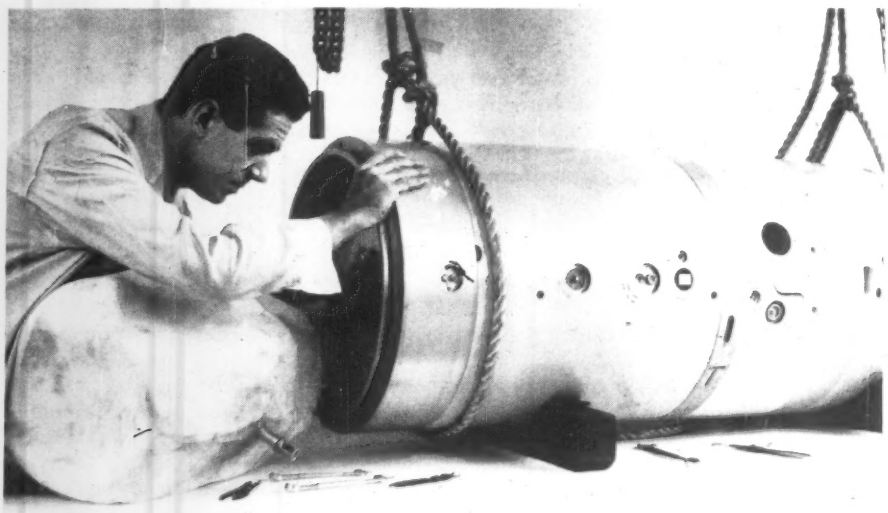
Plotting these underwater currents could also enhance the value of underwater freighters. Some scientists think fast (10 mph or better) currents running straight for thousands of miles will be discovered. They would be comparable to the jet-stream currents in the skies.

Here's another example: Leading oceanographers are convinced that underwater telephone cable breaks are the result of ocean-bottom "landslides." If and when oceanographers are able to predict where such displacements of bottom soil will take place, the telephone companies will be able to avoid multi-million dollar repair bills by laying the cables elsewhere or by other methods.

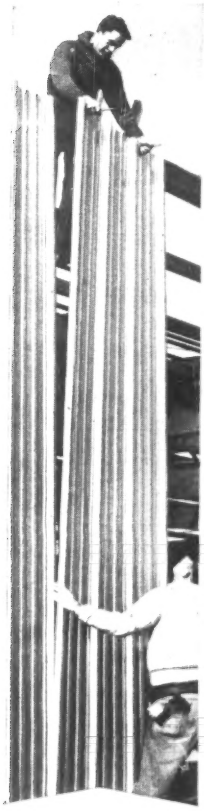
While fundamental research into the nature of the oceans continues, very practical improvements are appearing in present-day fishing methods. The most striking is "electric fishing." When a direct current flows in the water between two poles, fish are drawn to the positive pole, where they are sucked into a pipe and pumped into a trawler's hold. As many as a thousand fish a minute can be "caught" this way. The United States, Russia, West Germany, and other fishing nations are experimenting with this technique, which could multiply the current world fish harvest of 30 million tons—1 per cent of total world food production.

There are many other opportunities for new product development in commercial fishing. For example, fishing vessels carry extra fuel in 50-gallon drums. Emptied drums worth three to four dollars apiece are heaved overboard to make room for cargo. Now the Firestone Tire and Rubber Company has developed a lightweight, collapsible, non-disposable rubberized fabric tank. Each tank holds 1,550 gallons, yet it weighs only 175 pounds.

The oceans serve in other ways than satisfying man's appetite for fish. Seaweed is becoming an important additive for fodder and fertilizer. Chickens



DRONE SUB: *This technician is charging a drone sub with compressed air. The device, under development at Avien, Inc., Woodside, N.Y. (see story) will simulate an enemy sub in anti-submarine warfare maneuvers, an important defense equipment market.*



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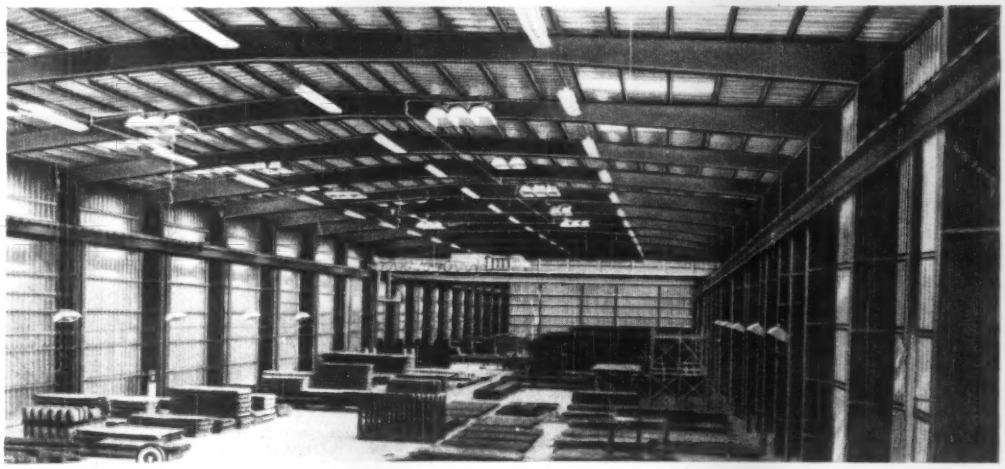

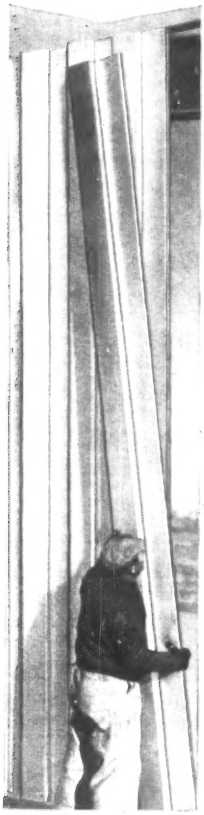

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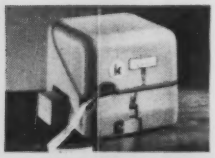

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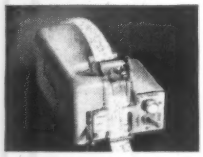

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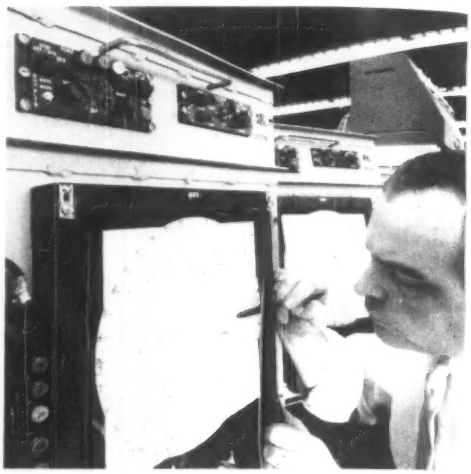

POWER BEHIND NEPTUNE'S THRONE: *Checking an electronic device that plots the position of enemy subs. Carried in the cockpits of Navy patrol planes, this Loral plotter gives the pilots a quick picture of the tactical situation. Undersea and anti-submarine warfare represents a sizable and steadily growing fraction of the huge defense equipment budget (see story).*

and ranch mink now receive kelp meal in their diets. Result: the chickens lay bigger eggs, and the mink—and eventually milady—sport shinier coats. Algin, which comes from seaweed, is replacing gelatin as a stabilizer in ice cream. Seaweeds are also a natural soil conditioner. They are also being investigated as a rich source of powerful new antibiotics. And German researchers have made a new kind of edible sausage casing using seaweed as a base.

For centuries, Orientals have been harvesting algae as food. Rich in vitamins and minerals, these tiny marine plants could help feed multiplying populations. And plankton—tiny floating or drifting creatures of the sea—could be caught cheaply by mechanical methods and processed into fodder for domestic animals.

When all the current activity connected with the oceans is evaluated, the dimensions of present and potential market opportunities look really impressive. For those companies looking for new technological frontiers, a leisurely cruise into these profitable waters may be more comfortable and more rewarding than a 25,000 mph ride through space. Starting from scratch, it should be much less costly and time-consuming to catch the front runners in deep-sea technology than the jet-propelled leaders in space.

—M.M.

Rx for Easing Executive Workloads

How can the harried business man get more done in less time with less strain? One solution, according to a poll of top executives and medical men, is surprisingly simple: Get away from the office.

EVERY COMPANY can reach new levels of personal and group effectiveness by adapting a simple work secret that is proving equally applicable to individuals and to committees.

Fifty executives in top and middle management were recently asked: "Under what conditions do you get the most work done?"

Forty-three of the men gave answers that could be summarized as: "When I'm entirely alone."

Some, for instance, spoke with delight of coming into the deserted office on a Saturday morning and clearing up the "in basket."

Several told how much they got done on a day when a cold kept them at home. "I have my secretary send over a mound of files and papers," said one executive. "Then I get into bed, close the bedroom door, and pitch in with the assurance that I won't be interrupted. If I have to discuss a point with someone else, I get him on the phone. That's far more efficient than talking in person because a phone conversation can be ended at will. After one day like that, my desk is clear for a month!"

In defense of homework

A few men said they are old-fashioned enough to take a briefcase home most nights. They maintain that 45 minutes spent quietly going through papers gives them a big edge the next day and makes life much easier.

These responses led to a check with psychologists and medical men who have specialized in protecting executive health. All of these authorities agree on the following points:

1. Men who can make their own schedules should plan to spend a day at home periodically if home can be made a quiet place to work.

2. Wherever possible, the custom of allowing executives to work for part of the day in strict privacy behind closed office doors should be revived. In most companies, this has come to be considered unfriendly, and few men below the very top dare to do it. But it's the nearest thing to isolation that can be achieved in an office and ought to be encouraged.

3. Companies should consider taking a room in a hotel or club where executives can retreat for a few hours of concentration.

This last point, radical as it sounds, happens to tie in with a practice that is beginning to be followed by some companies for all their group work. More and more companies hold committee meetings and sales meetings in hotel suites—even when adequate conference-room facilities exist in their headquarters.

A typical case is that of a pharmaceutical manufacturing company that formulates its major policies by means of an executive committee. Every three months, the committee's twelve members used to spend four hectic days in the corporation's beautiful conference room, trying to work while one man after another was called to the phone, interrupted to see a foreign visitor, or voluntarily strolled out to get a file or letter from his desk. Sometimes a member's absence meant that the discussion had to stop. At other times, the group went on but then had to re-cap its comments when the wanderer returned. These interruptions were regarded as inevitable, a necessary evil of the committee method.

A wise move

Then came a time when an accident in the plant above damaged the ceiling and walls of the conference room. Heavy repair work was under way during the very week when a meeting was to be held. Rather than change the schedule, it was decided to move the sessions to a mid-town hotel.

They started at 9:30 on a Tuesday morning, and by 4:00 on the following afternoon they had concluded the most pleasant and most productive meeting in the committee's history. In a total of fourteen working hours, free of interruptions and office pressures and the usual delays in reassembling after lunch, the executives accomplished far more than they ever had in four harried days at headquarters.

Many other companies are making the same discovery. The executive vice president of a metal products company recently said: "We never use our conference room for anything any more except talks with groups of visitors. Several of us belong to a club near here, and that's where we go for meetings of all kinds. For the trifling cost of room rental and lunches that are brought in, we get twice as much done. More important to me than the lack of interruptions is the fact that everybody comes fully prepared when he knows he'll be away from the office. If there are reports and memos to be referred to, we remember to bring them in advance. If we want a technical man to come in and brief us on some point, we plan it in advance."

The medical specialists endorse this thoroughly. They favor anything that contributes to an atmosphere of detachment for periods of concentration—whether it's group work or private thinking. Being away from the office permits calm and efficient focusing on one problem at a time, they believe.

Is it possible then—they were asked

in a series of washroom survey comments from "SBS soap counselors"

I showed them how to save money by putting the soap at the workers' fingertips!

Waring G. Houston

is the SBS soap counselor in the New England area. A specialist in industrial soaps for several years, he has helped many plants pinpoint the most effective and economical solutions to their skin cleansing problems. Here's a good example.

"After showing our presentation OPERATION PINPOINT to an eastern rubber company, I made a survey of their skin hygiene conditions and wash-up practices. They had a real (and costly) problem in removal of butyl vulcanizing cement from hands . . . especially after the cement had dried. Gloves couldn't be worn for this work and protective hand creams proved only partially effective. Consequently, workers made many extra trips to the washroom . . . and this was costing the company plenty in lost production time. I suggested that they simply *bring the soap to the workers* by using our SBS-30 Waterless Cleanser. It easily removes adhesives and tough soils, discourages the use of harmful solvents . . . eliminates all those extra, time-consuming trips to the washroom."

Money-saving suggestions like this *begin* with OPERATION PINPOINT — a thought-provoking presentation filled with facts about skin hygiene and washroom maintenance. The SBS soap counselor serving your area can pinpoint the right soap to do every skin cleansing job best and at lowest cost in your plant. Let him show you OPERATION PINPOINT . . . just call your nearest SBS office, collect.

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—that even the much-maligned habit of taking home a briefcase full of work at night does less harm than trying to do all one's work under the pressure of office conditions?

One physician voiced the consensus when he said: "The most damaging nonsense ever dinned into a business man's ears is the advice to 'forget your job when you leave the office.' First of all, it can't be done. Your mind keeps working so long as you face new problems ahead. Second, a little leisurely planning of business strategy the night before makes for a much calmer day at work."

Another doctor said: "I've compared facts and figures with colleagues in Europe and Latin America, where most business men have much longer hours every day than ours do. We've decided that the length of the workday has virtually no effect on health, whereas a tense, cluttered day—however short it may be—is definitely a menace to health."

Time to think

Not every executive can be allowed to work by himself whenever the notion strikes him. But every company can recognize the need for a certain amount of lone concentration. It can (1) encourage men to rearrange their schedules in order to provide a "planning period" each day; (2) put a "do not disturb" sign on their office doors and telephone lines whenever necessary; and (3) arrange a little time off to make up for work done at home.

The importance of this can be quickly measured by simply recalling that an overwhelming majority of people say that their best ideas and clearest thoughts come to them when they are alone. Then stand that fact up against the inevitable truth that most of those same people spend 75 to 100 per cent of their working hours in the company of others. That means the hours they are paid for are seldom their most productive ones.

"In other words," as one industrial psychologist put it, "an office is no place to be if you want to work."

There is no way to end this paradox of our complex society. But you can find an oasis away from it, and it is well worth the effort. Every hour you spend looking at your job from a little distance will pay you back a hundred times over in terms of new energy, new solutions to problems, and clearer perspective.

—CHARLES A. CERAMI

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The same cushioning action that makes life easier for the driver lets you move at faster safe

1960 CHEVROLET

speeds over any ground to get in more trips a day. The same shock-proofing effect that virtually eliminates shimmy and wheel fight—that makes handling so much easier—also absorbs most of the stress and strain ordinarily transmitted to the body and sheet metal. The whole truck holds up better, stays new longer, and its working life is increased by extra thousands of miles.

Take one of your present trucks—whatever make it is—over a particularly rough piece of road. Then, while the bounces and jounces are fresh in your mind, borrow a '60 Chevy from your dealer and cruise it over the same route. We'll rest our whole case on that one ride. . . . Chevrolet Division of General Motors, Detroit 2, Michigan.

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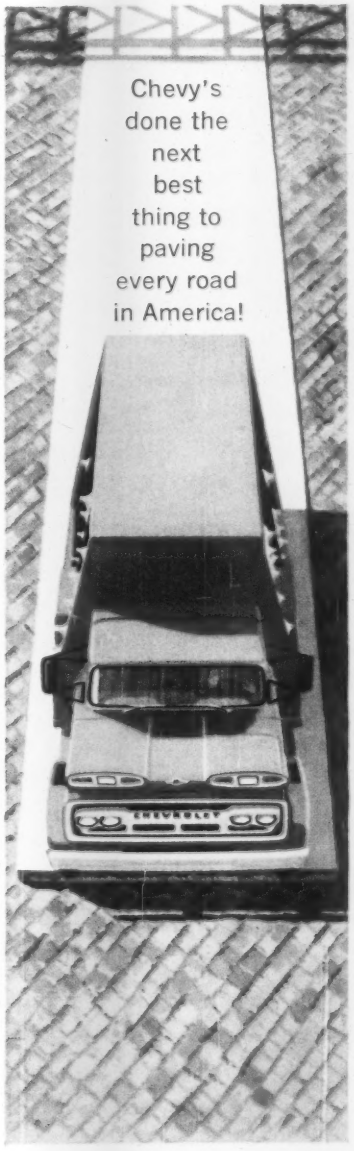

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Verdict on Labor by Top Management

What do industry's leaders really think about their opposite numbers in organized labor? Here's the surprising answer, as revealed by a survey of the DUN'S REVIEW *Presidents' Panel.*

AFTER YEARS of acquiescing in round after round of wage and fringe increases, industry is now fighting not only *against* further concessions but *for* prerogatives lost in the past. Management in the steel and automobile industries particularly have been showing a stiffer attitude in contract negotiations. Consequently, some of the biggest and strongest industrial unions have lately been finding the collective bargaining climate increasingly harsh.

These developments have led some observers to forecast a new "era of bad feeling" in labor relations. There are even some on the labor side of the fence who believe that management—fortified by the public feeling about inflation and revelations of massive corruption in some unions—is seizing the opportunity to weaken the labor movement seriously.

No "union-busters"

Strong evidence to refute this theory comes from a survey of the DUN'S REVIEW Presidents' Panel—evidence that the men who make industry's policy on labor have no desire to "break" the unions. They are not, in fact, anti-labor in any uncompromising sense. Speaking in confidence, they are willing to concede that the union movement has done much good in the past and may well do more in the future. Since the 100 men who answered the questionnaire are all company presidents, many of them of the largest industrial companies, their answers are a good index to the thinking of the most influential of America's managers.

The vast majority—72 per cent—believe that organized labor has been a constructive force in the American economy in the past, and only about half of these say that it has now gone too far and has become, or is likely to become, a destructive force.

Organized Labor . . .
Constructive or Destructive?

Constructive—say 72 per cent of the presidents

Destructive—say 14 per cent

Partly both—say 14 per cent

The views of another 14 per cent are mixed. Unions, they say, have been constructive in some respects and destructive in others. Only 14 per cent view the labor movement as wholly destructive.

Further, many of the company presidents have kind things to say about the union representatives with whom they deal, and a majority—51 per cent—believe that union leadership is improving.

Many company presidents, in fact, believe the unions have been a constructive influence because of the things they forced management to do—not only in the way of improving working conditions and wages but in raising productivity. For example:

"Pressure on management has brought workers benefits which management would never have granted on its own."

"I believe unemployment insurance, reasonable hours, and workmen's compensation are necessary, and they would have come more slowly without unions."

"I suppose organized labor has been a constructive force if for no other reason than that it has made management put in devices that increase productivity and provide a higher standard of living for all."

Labor monopoly feared

Why do some of those who believe unions have been largely constructive in the past now view them as destructive or potentially destructive influences? Mainly because they think union labor has evolved from a healthy countervailing force into a monopoly and in the process has begun demanding, and getting, wage increases that cause inflationary pressures and spur foreign competition. A few cite corruption, curtailment of initiative, and featherbedding or other drags on productivity.

Only one of the presidents, however, states that the union movement has "outlived its usefulness." The others seem to feel that the conditions they complain of will be corrected by legislation, public opinion, or the unions themselves.

"In the end," one man writes, "the best interests of the people will prevail, and organized labor must accept regulation to that end just as man-

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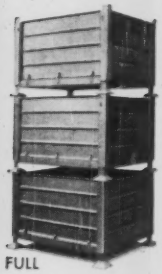
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agement has had to do in the past."

"This condition will probably change," says another. "The huge union treasuries (plus the workings of Parkinson's Law) will attract a more intelligent type of staff employee who may ultimately reach top union leadership. The new type of union leader will appreciate the opportunities inherent in making his union a constructive force in the American economy."

Only a handful of the presidents appear to believe union leadership is deteriorating. ("Particularly at the local level, leadership has descended into the hands of the self-seeking.") In addition to the 51 per cent who see general improvement, 12 per cent see improvement in some respects, and a great many see no change one way or the other.

Good marks for union leaders

The last view, however, is not as harsh as it may sound, since 11 per cent rate the top men with whom they deal "excellent"; 30 per cent say they are "good"; and 9 per cent characterize them as "fair" or "average." Only 13 per cent state that the union leaders with whom they deal are definitely "poor." The remainder cannot give a clear-cut answer, generally because they deal with a number of unions or find a difference (sometimes in favor of one, sometimes in favor of the other) between local and international representatives.

Typical of the favorable comments made by the presidents about union leaders are these:

"Excellent—tough, realistic, and professional."

"Capable, persuasive, honest, familiar with the economics of our business, cooperative, conservative, tough, and intelligent."

Those who found the leadership poor made such comments as:

"Clever, ruthless, anxious to gain power."

"James Hoffa—need more be said?"

Mixed reactions to the union leaders included:

"Competent, intelligent, biased."

"Realistic to company's problems, but unwilling at times to take a firm position with local union leadership."

"Intelligent, shrewd, equipped with basic economic facts but dedicated to the principle of increased income for the union man regardless of over-all effects."

—ALICE SMITH

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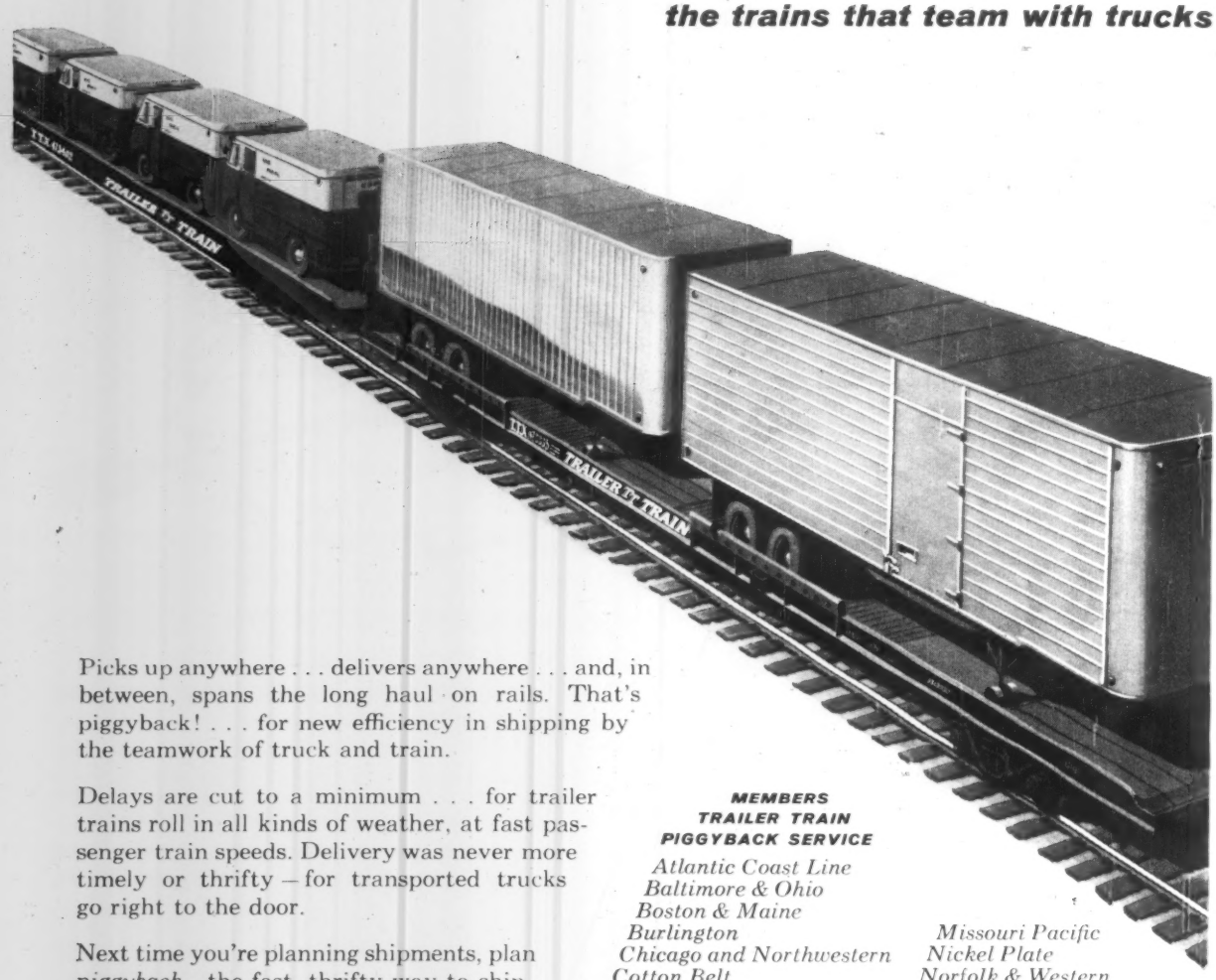

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HEAP OF PROFITS: *At the Hooker Chemical Company, engineers are developing techniques for converting slag discarded from chemical and steel mill operations into a tough material for road-building and other jobs. It is also used in roofing materials, insulation, and sewage filtration. Selling at $1 to $2 a ton, the slag brings in a nice profit—and gets rid of an unsightly mess.*

"Down to the Squeal of the Pig"

The Drive for By-Product Development

ACCORDING to one well-known myth of American business, the meat-packing industry makes its profits on all the by-products of the animal—hides, gelatines, tallow, and so on—not on the meat itself.

Like most myths, this one offers a good lesson because it has a substantial basis in fact. By the steady application of modern technology, the meat packers have developed an enormous line of profitable products based on all the by-products of the animal, down to the proverbial "squeal of the pig."

There are substantial reasons for such by-product development by any manufacturer:

- To counter lower profit margins on established products.
- For product diversification.
- To eliminate the cost of disposing of wastes.
- To take advantage of the ability of modern technology to create a demand for hitherto useless substances.
- To exploit lower-grade or contaminated natural resources as higher-grade materials or deposits are exhausted.

For one or more of these reasons, a number of manufacturers are pushing by-product development. Here are just a few examples of how industry turns waste materials into dollars:

Steel companies sell more than 35 million tons of blast-furnace slag each year for use in building roads, home insulation, soil conditioning, and even linings for oyster beds.

Corn steep liquor, formerly discarded by corn processors, is now a source of three valuable chemicals—calcium phytate, inositol, and phytic acid. A. E. Staley Manufacturing Company, Decatur, Ill., markets the latter as a rust inhibitor.

In the chips

The paper and pulp industry is successfully recovering valuable by-products from chemicals that have been used to convert wood chips into pulp. For example, Crown Zellerbach Corp. has a line of lignin derivatives taken from used pulping liquors.

Such diverse companies as International Nickel and Tidewater Oil are selling by-product sulfur at about $23 a ton. Thanks to an improved refining technique, Inco removes sulfur as well as selenium, cobalt, and other valuable metals, previously lost, from a purified nickel ore known as nickel matte. Tidewater Oil recovers its sulfur, along with valuable propane and butane, from natural gas with an unusually high 15 per cent of hydrogen sulfide. Since hydrogen sulfide is very corrosive, the gas could not otherwise be sold for fuel.

Hafnium, one of the best metals for use as control rods in nuclear reactors, is produced as a by-product of zirconium purification.

Millions of tons of bagasse (squeezed-out sugar cane) are still burned annually as fuel in the Caribbean area. But recently an American-owned company, Cuban Bagasse Products, has developed a structural board from the hay-like fiber. And W. R. Grace & Company, which for more than twenty years has been making paper out of bagasse, has now developed a technique for continuous instead of batch processing.

Disposing of used "pickle liquor" (a sulfuric acid solution) is a big problem for metalworking companies. The Blaw-Knox Company has adapted a European technique known as the Ruthner process, which reclaims sulfuric acid and high grade iron oxide from the pickle liquor. The acid is then used again for cleaning steel, and the iron oxide goes back into the blast furnace.

Bell Telephone Laboratories have

Paul DeKoning, President, Jantzen Inc.

"Moore forms make our paperwork work better"

JANTZEN'S NEW SYSTEM SHOWS SAVINGS IN TIME AND MONEY

This manufacturer of swim suits and sportswear has to act fast to get information to retail customers. The sooner the stores get invoices, the sooner they can price the goods and get them on the counter. Jantzen's automated system prepares invoices much faster, by speeding communications between departments. There is tighter control of all paperwork, with dollars-and-cents savings.

The system's efficiency lies in automatic printing of information on forms. Electric accounting machines and teletypewriters do the job. They translate punched cards and tape into such paperwork as invoices, shipping labels, express receipts and bills of lading. Every operation is faster and human error has been all but eliminated. The forms, especially designed by Moore, are Jantzen's control in print.

"The expert guidance we got from the Moore man saved us a lot of trouble when we set up this system," said Mr. Paul DeKoning, President of Jantzen Inc. Whatever controls your business needs, the Moore man's knowledge of ADP (Automated Data Processing) can help you. Look him up in the Yellow Pages, or write the nearest Moore office.

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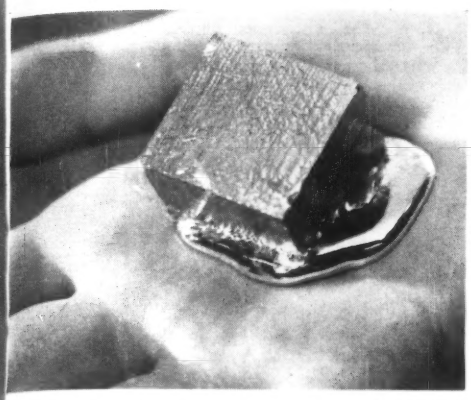


ANY TAKERS? *The aluminum industry is trying to find customers for one of its by-products—gallium. One of the low-melting-point metals (as you can see, the heat of a hand melts it), it could substitute for mercury in some situations. Gallium is also a semiconductor, therefore a possible competitor of germanium and silicon in transistors. There's one big stumbling block: at present demand levels, it sells for more than $1,000 a pound!*

developed a process for removing valuable helium from natural gas, where it is found in proportions up to 7 per cent. Unless it is removed, the helium is pumped along with the gas to the user.

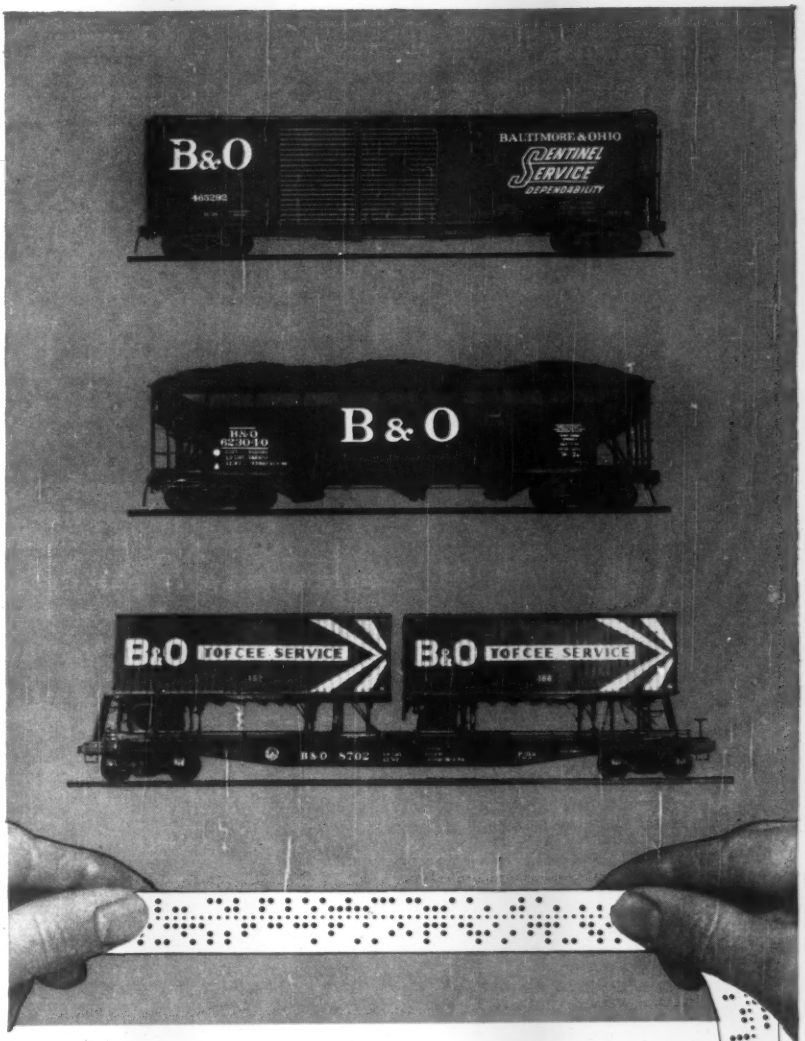
Since helium is inert, it is useless as a fuel—but demand for it is burgeoning at a phenomenal pace in the metal-working industry, which uses it to provide an invisible blanket when welding or melting metals such as titanium or zirconium.

Practically all the germanium used in this country to make transistors—at $250 an ounce—is a by-product of copper refining. It formerly went up the flue.

Two-way savings

In the coming decade, incentives to by-product development will be even greater. Tough competition will shrink profit margins and make product diversification even more attractive. Any cost savings through elimination of charges for disposing of waste will be doubly appreciated.

As a hedge against sudden political changes in nations that supply us with high-grade raw materials, development of lower-grade deposits in the United States and in friendly nations is essential. Since the technical explosion of our times will certainly create demand for new materials, this last factor could be one of the most potent in stimulating by-product research. —M.M.



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U. S. Government Obligations	407,615,712.19	Acceptances Outstanding		1,247,404.48
State, County and Municipal Bonds	91,250,001.92	Reserve for Unearned Discount		18,536,763.22
Other Bonds and Securities	7,911,398.12	Reserve for Interest, Taxes, etc.		10,528,383.28
Stock in Federal Reserve Bank	3,000,000.00	Other Liabilities		5,077,926.87
Loans and Discounts	975,776,081.32	Capital Funds:		
Bank Premises and Equipment	17,367,983.03	Capital Stock ($10.00 par value)	$30,593,750.00	
Other Real Estate	1.00	Surplus	69,406,250.00	
Customers' Liability under Acceptances	1,177,095.58	Undivided Profits	24,278,683.34	124,278,683.34
Accrued Interest Receivable and other Assets	13,844,378.97	Total Liabilities		$1,868,811,428.37
Total Resources	$1,868,811,428.37			

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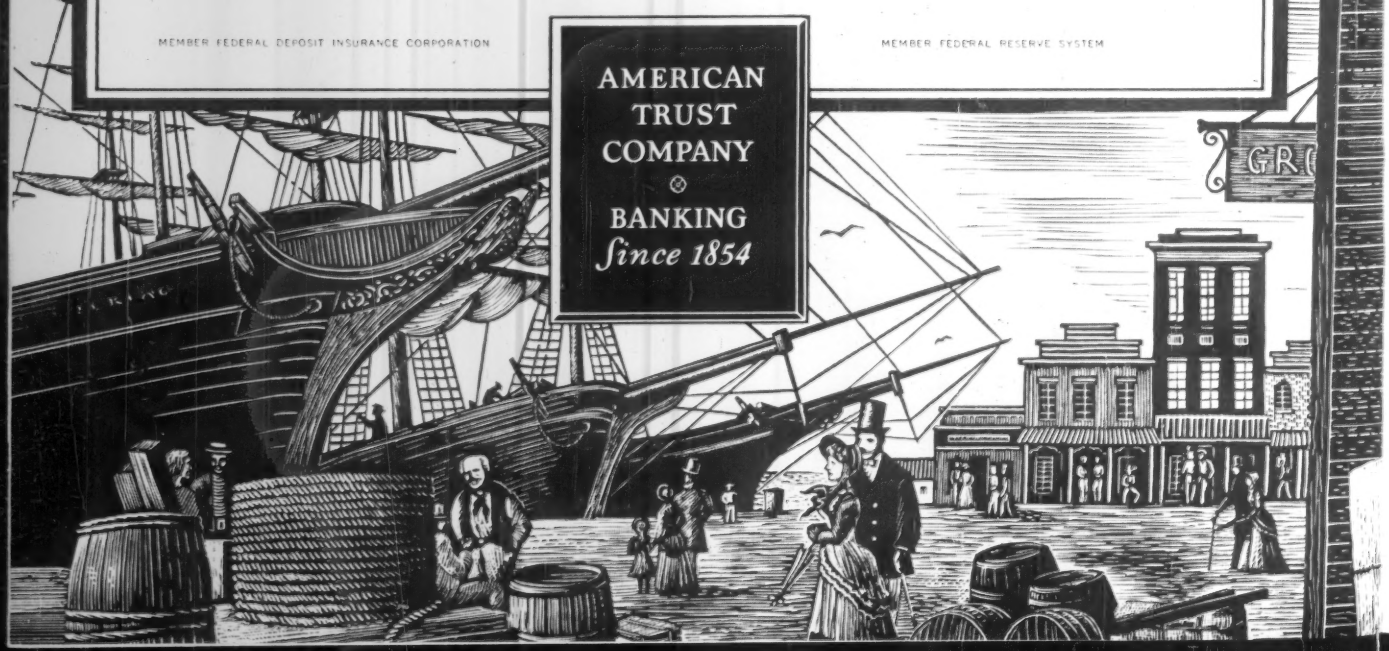

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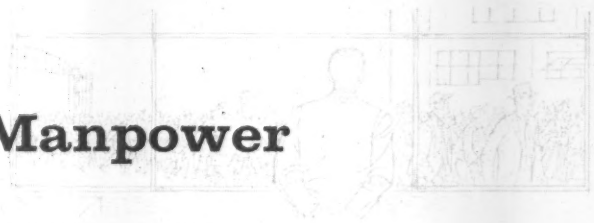


LAWRENCE STESSIN

AN OLD corporate image is in fashion again. The bloated capitalist with a dollar sign on his protruding front —symbol of the greedy boss—is once more a familiar sight in the labor press.

For many years, union publications have been toning down the "class war." Indeed, for almost a decade, management, while never a hero in the 800 labor periodicals which have a circulation of about 13 million workers, was not quite the total heel either. Sometimes, something good was said about "the boss." *The Machinist*, labor's most sophisticated organ, published by the International Association of Machinists, would even write semi-laudatory articles about management on occasion. But in a recent issue, after a long absence, the stogie-smoking, plutocratic entrepreneur showed up in a cartoon on the editorial page. A similar cartoon character, labeled "Big Industrialist," was shown spreading "lies" about labor on the editorial page of *The Advance*, put out by the Amalgamated Clothing Workers.

Choleric cliches

News stories of current labor relations are equally choleric. Consider this piece of indignation dished up for union members in a steelworkers' journal during the strike.

"Steel workers resent it when these big, fat slobs, these steel executives who vote themselves enormous salaries and expenses, tell the workers that wages and fringe benefits are too high already and that unions are leading the country into ruin."

Cliches of a bygone era like "robber barons," "union busters," "sweat shop," "speedup," "money hungry" stand out in even a casual perusal of a month's output of labor journalism. And, as though to remind workers that history might repeat itself, many labor journals are running feature stories of the proletarian struggles of 50 years ago, when guns, bayonets, and injunctions were the "boss weapons" used to keep employees from organization and recognition.

Why this quick change in editorial policy? To judge from a reading of the labor press, there are several reasons. Most important, of course, is the new posture in collective bargaining assumed by management. Labor editors are telling their readers that business is united in a plot to weaken and then destroy the union movement in America. They depict the steel industry's stand on work rules and the railroads' campaign against featherbedding, not as cost objectives, but as subtle devices for delivering the *coup de grace* to unionism. "Proof" of this "conspiracy" was brought up many times in the past few months by intimations that industrialists outside of steel—auto makers, for example—failed to pressure steel negotiators to settle early.

The new labor law, designed to set up internal controls in unions, is used as additional evidence that the forces of anti-unionism are riding high and that the workers are in for rough times ahead.

Says one union editorial: "The passage of the new labor law through the personal intervention of President Eisenhower is a flanking movement in a pincer operation intended to chew up unions and leave them helpless to protect their members."

It is interesting to note that not a single union paper has had a kind word to say about the Landrum-Griffin Act. The stand taken by the labor press is that all of labor is being penalized for the excesses of a few rapscallions. And several of the union journals are encouraging members to do a public relations job to fight off the supposed assault on unionism. Asks *The Advance*: "Have you defended unionism in conversation with a stranger, in a bull session with a neighbor, in a public place where some loud-mouthed know-nothing has spouted off about labor racketeers and inflation? Speak up whenever you hear unions being slandered. Your taking on this chore can help win a war."

Automation under attack

Another issue that seems to have touched off labor's suspicions of an impending "hot war" of management against labor is automation. The labor press makes no compromise with economic theory on the subject of mechanization of jobs. The fact that more jobs and higher pay have resulted from the introduction of labor-saving devices finds small acceptance in the editorial pages of union publications. Only the short-term dislocations are stressed. For example, one union paper runs a cartoon of workers displaced by automation with the caption of an employer saying to the unemployed group: "Cheer up, this is progress."

Among the editorial weapons used by labor editors to show that employers are self-centered in their bargaining strategy is criticism of management personnel practices. Stock options for management people appear to have become a favorite target of the union press. The United Auto Workers' *Solidarity* (October 1959) ran a report by the union's research section headlined: "Stock Option Scandal." It charged that a "special

» *Old Moneybags is back as the villain of the piece as the labor press renews the "class war."*

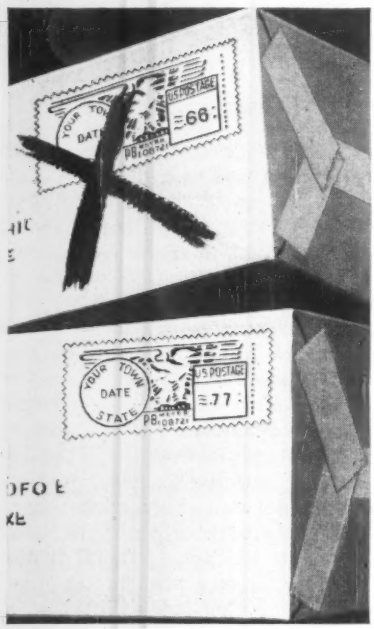
» *Automation fears and management's new tough line are triggering bitter, emotional blasts from the unions.*

Ready for increased parcel post rates?

Parcel post rates go up on February 1, average increase 17%. This is a good time to check your scale. An old, inaccurate scale that overweighs —wastes money on excessive, unneeded postage, more now than ever before. In a year the waste can be considerable.

On the other hand, a scale that underweighs can irritate your customers who have to pay "Postage Due" charges on your packages. This doesn't improve your corporate image!

An accurate, dependable scale is a real economy. Pitney-Bowes makes the best.



Illustrated is the Model 3700 Parcel Post Scale with 70 lb. capacity. Air and surface rates are shown for each zone; figures are illuminated and magnified by a powerful lens, reducing errors, avoiding squinting and eyestrain. Lifetime ball bearings maintain accuracy indefinitely. Saves time.

Another model, the S-510 with 10 lb. capacity, shows letter and parcel rates for all classes of mail. Its automatic pendulum mechanism is built for enduring accuracy. Registers and levels instantly. Chart markings are large, easily legible.

Five other models for letters and parcels. Ask the nearest PB office for a free demonstration. Or send coupon for illustrated booklet.

FREE: *Handy desk or wall chart of new postal rates, with parcel post map and zone finder.*

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Originator of the postage meter . . . offices in 122 cities in U.S. and Canada.

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new crop of millionaires has risen in recent years" as a result of stock option plans. The article was a detailed analysis of how executives of such companies as Ford Motor, Chrysler, U.S. Steel, Goodyear Tire & Rubber, and General Motors made "short-cuts to fortunes." Said the union paper:

"Stock option plans provide tax-privileged, risk-free opportunities unrelated in any meaningful way to executive performance and unchecked by stockholder control. The taxpayer, the consumer, and the stockholder all pay for such opportunities in one form or another."

Scorn for the stockholder

The stockholder doesn't come away unscathed in the UAW charge of corporate self-interest. The paper puts it this way:

"For a twelve-and-a-half year period, 1947 through June 1959, the worker would have received in paychecks $56,008, and the shareholder would have received in dividend checks a total of $116,849—or 108 per cent more than the worker."

Featherbedding is another popular issue. Here, the counterattack takes the form of a charge that management "does not come into court with clean hands." *Labor*, the official publication of the Railroad Brotherhoods, featured a story in its November 7 issue which was headlined "Featherbedding Rampant Throughout Management." A chart accompanying the piece claimed that in 1923 when there were 1.8 million railroad workers, there were 16,000 executive officers on the railroad payroll. In 1959, according to this chart, there were less than 900,000 workers, and the ratio of executive personnel remained at 16,000.

"Management," said the paper, "is often embarrassed by featherbedding on its own level. The American Institute of Management reported that 90 per cent of the U.S. companies suffer from featherbedding in the executive suite—managers who are kicked upstairs to vice presidencies and their nephews who have little to do."

However, no mention has been made in the railroad union press of the rise in management-level jobs in the unions themselves. According to the Association of American Railroads, executive jobs in unions have more than doubled since 1923, although current membership is half that of the 1920's. In 1923, the rail-

CF reefers go places—by land and sea

In Consolidated Freightways truck-ship service to Alaska and Hawaii, freight is loaded *once* in the port area. Only the container is rehandled. The result is a coordinated motor freight service — door-to-door — on both perishables and general commodities.

This is just one more way in which Consolidated Freightways *leads* the way in handling frozen foods and other commodities requiring special protection. CF was a pioneer of reefer service, and today offers the most modern and versatile equipment continuing research can develop. Throughout its regular route system, insulated trailers with mechanical heating and refrigerating units meet the highest standards of performance under all extremes of climate.

In this and in each of its diversified services, CF strives to anticipate and meet the rapidly changing needs of today's shippers and consignees. For more information contact the Consolidated Freightways Information Center, Box 32, Chicago 50, Illinois. Telephone AUstin 7-7003. TWX Bellwood 172.

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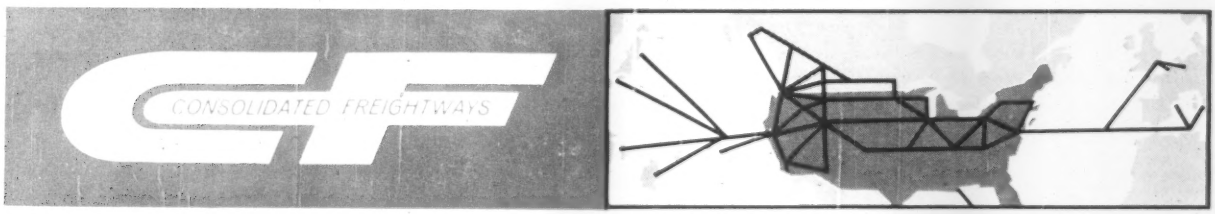

TRANSPORTATION WITH IMAGINATION

RANSBURG

What Would Paint Savings Like This* Mean in YOUR Finishing Department?

Quality is all important in the production of fine Metalcraft furniture by George Koch Sons, Inc., Evansville, Indiana.

That's why they use the Ransburg Electrostatic Hand Gun to apply a uniform clear coating on their brass-plated furniture. The protective coating is baked on. Although the bulk of their present production is in the popular brass line, they still paint the metal furniture in a variety of colors with the Hand Gun.

Painting is CLEANER ... QUICKER ... CHEAPER *with the Ransburg Electrostatic Hand Gun.*

These chairs and table are typical of the Koch line of metal furniture.

*10 GALLONS OF PAINT NOW DOES THE JOB WHICH FORMERLY TOOK 30 GALLONS

On one item—a TV table—they formerly used 30 gallons of enamel to coat 1000 units by combination dip and air spray method. Now—with the Ransburg Electrostatic Hand Gun, they paint 1000 tables with only 10 gallons. And, they get a better, more uniform coating, too.

NO REASON WHY YOU CAN'T DO IT, TOO!

See how the Electrostatic Hand Gun can save time . . . paint . . . and cut costs in YOUR finishing department. Or, if your production justifies, it'll pay you to investigate Ransburg's automatic electrostatic spray painting equipment. Write for our No. 2 Process brochures which show numerous examples of modern production painting in both large and small plants.

RANSBURG

RANSBURG
Electro-Coating Corp.
Box-23122, Indianapolis 23, Indiana

road unions had 39 vice presidents. By 1959, that figure rose to 63, not counting staff personnel.

Bankers, a perennial target of the labor press, are not neglected in the columns of union periodicals. A feature, "Timely Topics," in *The Machinist* shows "the Old Banker Shop Quartet" singing this doggerel:

"Oh, we're against inflation in our entire nation, but we want higher interest for all of the duration."

The union press throws constant barbs at other management methods. The "human relations" philosophy of business is often attacked in union organs. Management development, communications, creativity are frequent subjects of the cartoonist's pen. For example, one cartoon panel shows the boss making a talk at a company dinner. The caption reads:

"For his 30 years of distinguished and loyal service in the company, I should like to present this token of our gratitude to whatsizname here."

Another: An executive is talking to an employee: "I want a man with initiative and leadership. Now get in there and do exactly as I say."

Objectivity is not a basic of the labor press. Even its advocates say that the purpose of the union periodical is to present the official news of its sponsor. Says Jack Barbash in his excellent book *The Practice of Unionism:* "The general run of labor paper makes no attempt to provide the pros and cons on any issue, nor does it provide a medium for the expression of opposition views within the union."

Labor's editorial policy

The latter statement is borne out by a comment summarizing a survey of the labor press made by Dr. Richard Garver of the Montana State University. He says:

"The union paper does not serve as a platform for dissident voices, either those of the rank-and-file or management. The publication does not serve as a membership forum. Communications move only in one direction—downward. Industry opinion is simply not heard."

What then is the consistent theme of the labor paper? Dr. Garver provides this breakdown:

1. The union protects the worker's interests.
2. The worker can place his trust in the union.
3. The union member is a respect-

able citizen.

4. Opponents of labor unions are unethical and use unfair tactics.

5. The Republican Party is anti-labor, reactionary, and opportunistic.

6. Business is greedy, shrewd, and irresponsible.

7. The Government is apathetic or opposed to labor.

8. The Democratic Party is a friend of labor.

9. Communism and colonialism should be opposed. END

Labor Tips and Trends

Down to Grassroots

The General Electric Company is one of the leaders in a campaign to encourage managers and employees to become more politically active. In Ohio, GE launched its program in a big way by inviting the governor of the state to visit the plant and engage in a question-and-answer session with rank-and-filers. Questions submitted to the governor in advance were solicited by publishing this form in the employee publication: "Dear Governor DiSalle: Here's the question I'd like answered about Ohio's problems and prospects for the future."

Caution

TV scandals have made all segments of industry "payola" conscious. The Douglas Aircraft Company, Santa Monica, Calif., sent this note to all its suppliers:

"As a contractor for the Government, this company deems it proper and necessary to request its business associates to refrain from offering gifts to or providing entertainment for Douglas employees on any basis. For your information, all company personnel are aware of our policy and of the penalty of instant dismissal which is provided for infractions."

New Business

The new labor law provides that unions must hold elections of officers at least every three years. Elections must be by secret ballot, not hand vote. This provision has resulted in the birth of a new organization—the Election Institute (New York). The outfit is non-profit, and its objective will be to promote the effective use of the secret ballot in union and labor-management elections.

HERE'S PROOF

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Under conventional financing, a 62,000-sq.-ft. plant costing $6.25 per square foot would cost $639,735 over 20 years at current interest rates of 5½%. That is, if you could get financing for 100% of the property at that figure.

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Want more details on how you can save in WESTern PENNsylvania as did many other firms*? Write today. *Names on request

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Cabin Hill, Greensburg, Pennsylvania DR-20

Yes, I'm interested in details of WESTern PENNsylvania's labor supply—as well as:

☐ Plant Location Services Booklet ☐ 100% Financing
☐ Relocating or Establishing a Branch Plant

Please handle in confidence and mail to:

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Individual_____ Title_____

Address_____

City_____ Zone___ State_____

PRACTI

Prerequisite for PractiMation: Practical business equipment, so easy to use that no special personnel are needed to operate it.

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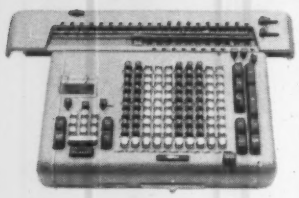

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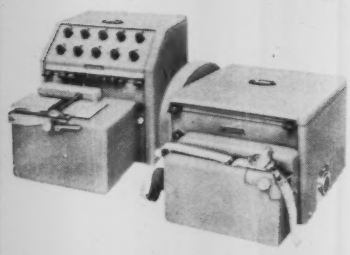

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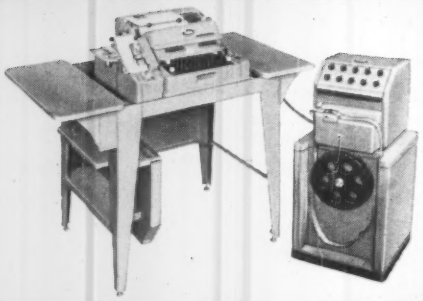

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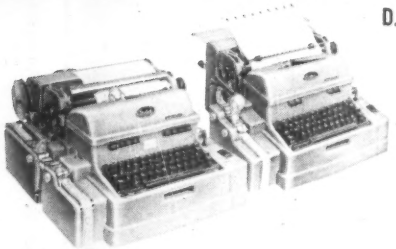

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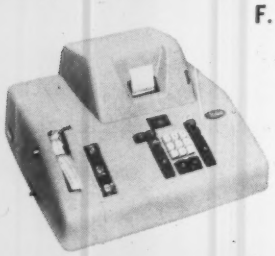

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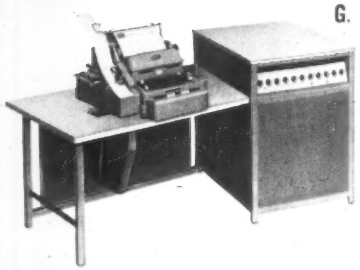

MATION

A new word, which means more than automation, for it is the custom-fitted application of today's finest automation equipment to your particular needs...

Friden announces a new concept of office automation ... automation so hand-in-hand with *practicality*, there can be no other word for it.

This is a culmination of Friden's years in integrated data processing research and development. It is Friden's assumption of responsibility for the most important phase of automation—its practical application!

The first step to PractiMation is a critical analysis of your office. Second, an outline of your objectives for increasing the efficiency of your present employees. (No need to think in terms of replacements or additions to your staff.) Then, consult your Friden man. He is an expert in his own right, and has solved a good many problems similar to yours. His help can be invaluable.

That is "phase one" of your program. Next, you need equipment. Practical equipment, which can be used by your present personnel without special training; equipment which is sanely priced, easy to install. And, above all, equipment which is expandable with your business. But with so many business machines available today, it's hard to choose a particular one or combination of them which would be most practical for you.

PractiMation is Friden's answer. PractiMation is your guide to selecting the right machine for the right job at the right time. Here is a brief description of some equipment which Friden makes, sells, installs, and services:

The equipment at left:

A. Friden SBT Calculator — the famous "Thinking Machine of American Business." Touch-one-key simplicity. Performs more steps in figure-work without operator decisions than any other calculating machine.

B. Friden COLLECTADATA® — a new system for accumulating data from many or widely separated points of origin, and for channeling it to a central processing point. Stations may be strategically located in any number of departments where data originate.

C. Friden FLEXOWRITER® (Model SPS) and SELECTADATA®—the Flexowriter is an automatic writing machine which produces a code-punched tape while writing an original document. The punched tape automatically creates other records, eliminating the continuous and costly manual reprocessing of data. The Selectadata searches out and prints selected data in punched tape. It can be programmed to select specific items in invoicing, names and addresses, any of scores of specified item data.

D. Friden JUSTOWRITER® — any typist becomes a skilled type compositor as her typing on the Recorder unit produces both a typewritten sheet for visual check and punched paper tape which the Reproducer unit "reads" and reproduces with all lines perfectly justified. Automatically provides professional-looking composition for offset reproduction right in your office.

E. Friden "Natural Way" Adding Machine (Model ACY) America's most versatile adding machine, subtracts and multiplies too. Full figures entered on keyboard register in Visible Check Window before they are printed or added. "Natural Way" Friden-patented keyboard "cradles" the working hand.

F. Friden ADD-PUNCH® (Model APT) — Outstanding example of punched tape accounting efficiency. Lists figures and totals on adding machine tape ... at the same time, selected data is punched into tape to program for subsequent automatic processing—payrolls, audits, inventory control.

G. Friden COMPUTYPER® (Model CTS) — writes and figures a complete invoice in one operation with virtually no operator intervention. Reads alphabetical or numerical data from punched tape, edge-punched cards or tabulating cards; data not pre-punched is entered through the typewriter keyboard. The Computyper CTS and any good typist make up an entire billing department.

These are a few of the amazing machines Friden offers the world of business to increase general office efficiency. PractiMation, you'll find, can work for your company too. In Friden's file there probably is a proven answer to the specific problem of your office. For information call your local Friden office or write to Friden, Inc., San Leandro, Calif.

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When you make your product of *Nickel* Stainless Steel, you give it important advantages in today's competitive market.

You give it the advantage of product quality—the lustrous beauty, outstanding serviceability, freedom from corrosion, and ease of cleaning that consumers prefer.

In addition, you give your product the benefit of promotion such as shown above, in which stainless steel housewares are featured in department store displays and in national advertising.

Consumer preference for Nickel Stainless Steel products is further insured through research, engineering, and technical service to fabricators, which results in constantly improved quality and greater customer satisfaction.

The basic beauty and serviceability of this gleaming metal, combined with preference-building activities by Inco and stainless steel producers and manufacturers, are why products of Nickel Stainless Steel will have an increasing edge in the market place of the '60's.

Why not consider Nickel Stainless Steel for *your* product? ©1960, T.I.N. Co., Inc.

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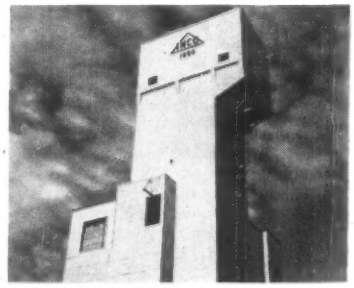


TO INSURE PLENTIFUL NICKEL for stainless steel and other uses, Inco-Canada is developing a mine in Manitoba to step up Inco-Canada's capacity to 385,000,000 lbs a year. This will boost Free World projected nickel output to over 650,000,000 lbs in 1961—an all time high, and 60% more than the 1959 Free World consumption. Above: headframe of new mine.

Inside Industry

- ✓ *A revolution in tape recording?*
- ✓ *Outside guidance for R&D*
- ✓ *Coming: midget hydraulic equipment*
- ✓ *New job for numerical control*

New Recording Revolution

Nothing's sacred these days! One of the supposed staples of our new industrial society—magnetic tape—now appears to have a potential rival as a result of a new technological advance, "thermoplastic recording." The new technique could have serious consequences for manufacturers of magnetic tape and of large magnetic recording equipment.

The plastics manufacturers who supply the raw base for magnetic tape need not worry. The new experimental system also depends on a plastic tape, a three-layered variety.

Dr. W. E. Glenn of the General Electric Research Laboratory invented the new system. It accepts the electrical output of either a television camera or a computer and converts it into a stream of electrons, which is deposited on the plastic film moving by. The electron charge on the plastic distorts it, and the distortion image is engraved in the film by instantaneous heating and quick cooling.

Since an actual image is engraved on the film, it should be as easy to "edit" as ordinary photographic film. This is an advantage over magnetic tape, which has to be run through playback equipment before anyone can tell what's on it. The new film can also be erased and reused.

There are still some important problems to be solved. The box in which the recording takes place must be kept under high vacuum. Assuming this requirement is met on a regular, easy-to-maintain basis, it would still probably eliminate this system for portable and home recording equipment. Vacuum pumps are bulky and take at least a minute to produce a vacuum. However, movies made by TPR can be shown on an ordinary home movie projector with an inexpensive optical modification.

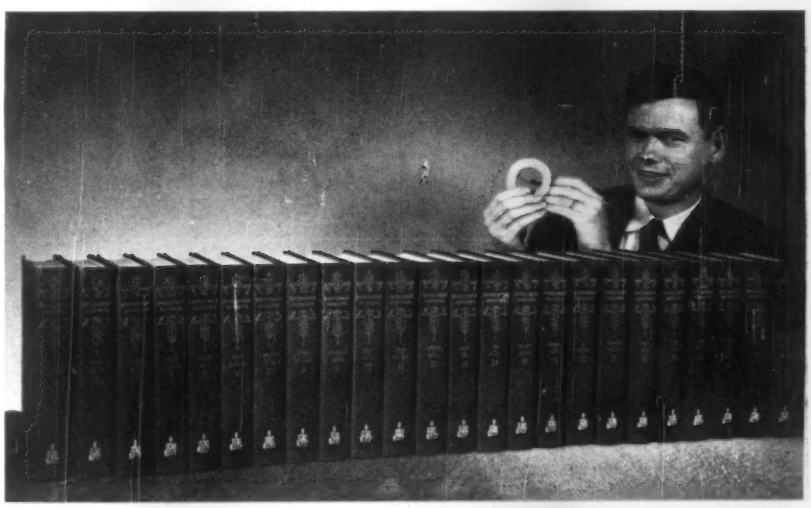
Right now, thermoplastic recording looks like a strong competitor for magnetic video recording and for commercial movie photography equipment. Since the new system offers extremely fine focusing, a lot of information can be packed into an inch of film (see photo). This should also make it attractive to computer makers, who dote on high-speed recording.

The General Electric Company revealed information on its new recording system to military authorities about two years ago. TPR has important applications as an adjunct to radar, in electronic countermeasures, in anti-submarine warfare, in missile guidance, in satellites and space vehicles, and for aerial reconnaissance. For example, a missile equipped with a TPR "map" of its proper path could compare the appearance of the fast-approaching target with the map and make the necessary flight adjustments.

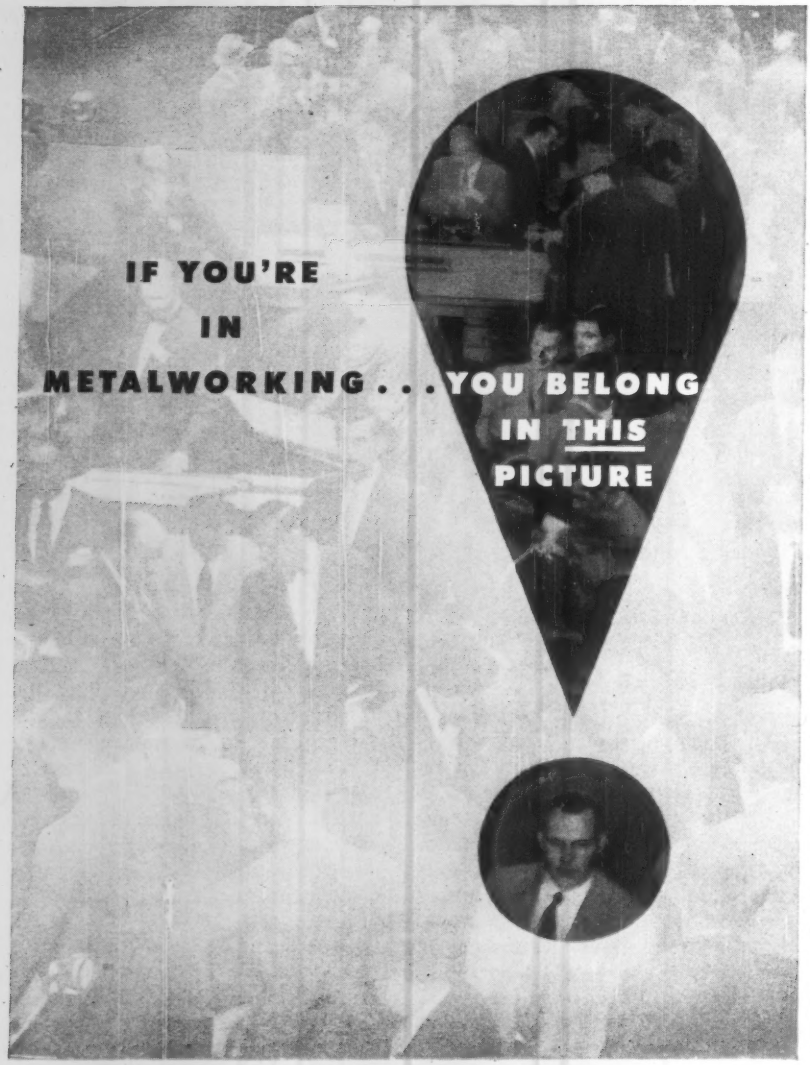
Despite the enthusiasm of some engineers connected with television broadcasting, the Ampex Corp., of Redwood City, Calif., principal manufacturer of $60,000 video tape recorders, denies that the new system is a real threat. Ampex has revealed that it has been studying "electron-beam-etching" systems like the GE method, as well as other new information recording techniques, but it refuses to release details.

Research "Brain Trusts"

In this era of rapidly expanding research horizons, no company—even the largest—can afford to cover all



HIGH-DENSITY RECORDS: *By means of thermoplastic recording (see story above), all the information in the 24 volumes of the Encyclopedia Britannica could, in principle, be recorded on the small roll of plastic tape held in the hand of the inventor, Dr. William E. Glenn. What's more, the data could be recorded at the rate of one volume a minute.*



1960
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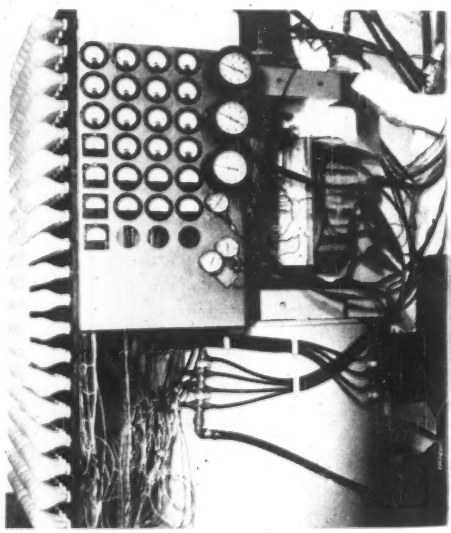
bets. Research-based manufacturers are faced with the increasingly difficult task of deciding where to aim costly research efforts.

Some companies are trying to solve the problem by setting up advisory councils made up of the top research leaders in the nation. Westinghouse Electric Corp., has two technical college presidents and a famous metallurgist. Daystrom, Inc., has also set up a consulting "brain trust" at the suggestion of Dr. Mervin J. Kelly, retired head of Bell Telephone Laboratories.

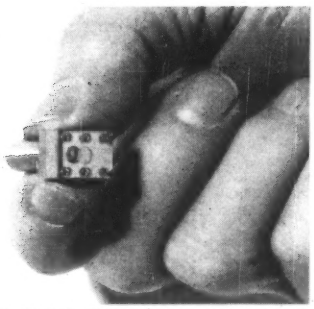
The five professors who will advise Daystrom will meet two or three times a year. In between, they will be encouraged to visit Daystrom's various establishments. Smaller companies could follow the example of Daystrom and others by hiring researchers and college professors from nearby universities.

Miniaturization Step-Up

That high-grade shrinking process called miniaturization is commonly thought of as the private business of electronics manufacturers. However, miniaturization can also bring big benefits to manufacturers of certain types of mechanical equipment. (See



MAGNETOHYDRODYNAMICS RECRUIT: *Since the first announcement of the development of "magnetohydrodynamics," a new method of making electricity (see* DUN'S REVIEW, *December 1959, page 78), another company, backed by ten power utilities, has leaped into the fray. Here, a technician works on an experimental MHD generator at Avco Corp., research lab in Everett, Mass. The system turns hot air into 10,000 watts of electricity.*



HARD-WORKING PUMP: *This tiny gadget is a miniaturized hydraulic pump developed by Electric Autolite to power its new experimental central hydraulic control system for automobiles (see story).*

DUN'S REVIEW, January 1959, page 44.)

One area for possible miniaturization that is currently in the spotlight is hydraulics. Hydraulic controls are used on large machine tools, on thousands of in-plant, off-the-road, and highway trucks, in aircraft, and on many types of production machines. But the largest market by far for miniaturized hydraulic controls is in the family car.

Right now, the major auto manufacturers are all considering central hydraulic controls for cars. There is one car in production already—the French Citroën—that has a central hydraulic system operating many devices. In American cars, separate hydraulic systems are already used for power brakes and power steering.

The Electric Autolite Company, Toledo, has developed a central hydraulic system for American cars, comparable to the central electric systems on tens of millions of cars. What's more, the new system is miniaturized! The hydraulic pump, which develops an ½ of a horsepower, is about the size of a cigar butt (see photo).

Now, engineers of the "Big Three" are trying to standardize on a hydraulic fluid for all cars. Such an agreement would help speed the introduction of central hydraulic systems and also simplify their maintenance once they start coming on the market.

If the automobile industry goes in for hydraulic systems like the one on the Citroën, it would mean a big boost for hydraulic controls, both standard-size and miniaturized. The wide availability of the sort of low-cost, easy-to-repair components demanded by the auto industry would encourage many other manufacturers to include hydraulic controls on their products.

Continued on page 84

Cactus garden at famed Huntington Library in San Marino

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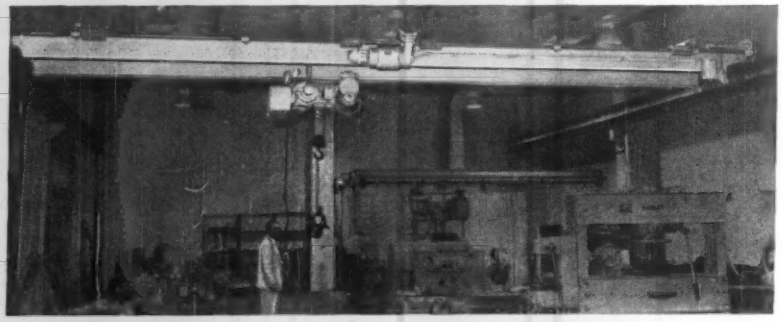
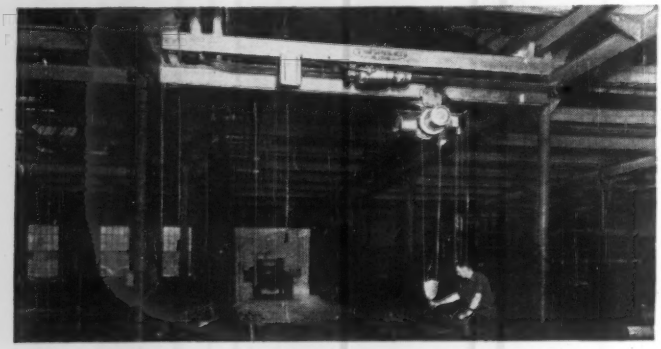


OVER-RUNNING where double beam cranes are not practical or for auxiliary service.



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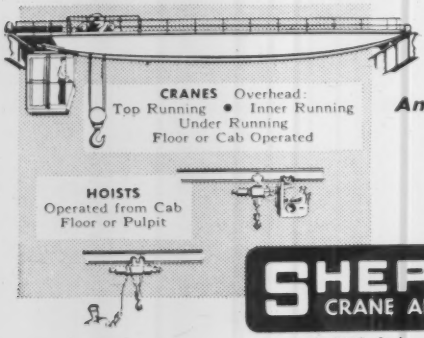

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New Twist in Controls

Numerical control, which only calls for one jab at a pushbutton to turn out a complex metal part, has finally found a substantial application outside the metalcutting field (see DUN'S REVIEW, August 1958, "The Coming Revolution in Machine Tools").

Three manufacturers have teamed up to produce a machine that automatically bends straight tailpipe stock to fit any car. Higher-speed, higher-horsepower autos have boomed the muffler and tailpipe replacement business—but the attendant inventory problem is plaguing the retail dealers.

Called the Bend-O-Matic, the new machine was designed and will be manufactured by Baldwin-Lima-Hamilton; the electronics comes from General Electric. The machine itself was conceived and will be marketed by Nu-Era Corp., Rochester, Mich. The companies also hope to sell the new machine to manufacturers of tailpipes for the original equipment market.

Swords into Plowshares

The latest list of "Inventions Wanted by the Armed Forces" includes a number of devices or materials that should also find widespread commercial application, if and when they are developed.

Here are a few:

- High-temperature, high-pressure seals capable of preventing gas leakage at pressures up to 40,000 psi and 2,000° F
- Flexible adhesives that retain their strength from − 50° F to 1,800° F
- High-strength adhesives capable of producing joints between metals that will withstand tension up to 50,000 psi
- Methods for determining the magnitude and number of impacts to which containers are subjected during shipment
- "Stick" meats—a process for converting fluid, semi-solid, ground or bite-size foods into rigid, edible rods
- Anti-fogging plastic facepiece
- A device for telling when a helicopter is standing still in midair (zero air speed)

These and other military equipment problems of interest to enterprising research-oriented companies are detailed in a brochure which is available on request from National Inventors Council, Washington 25, D.C.

—M.M.

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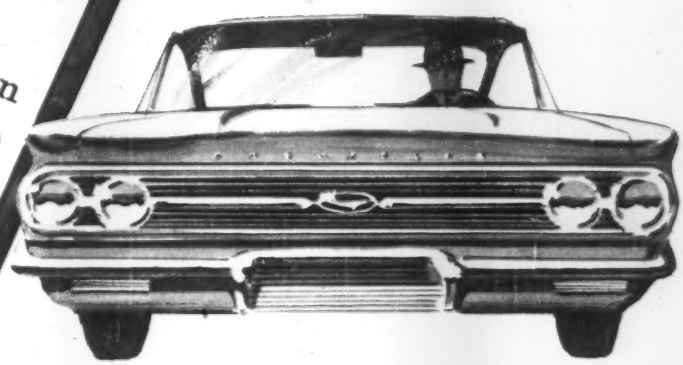

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THE LESSEE PURCHASE PLAN gives all the advantages of leasing to companies interested in having their fleet manager or branch office handle purchasing, used car sales, maintenance, and other fleet operating matters.

THE ACCELERATED DEPRECIATION LEASING PLAN provides for monthly payments established on a basis which would allow higher payments in the early years of a vehicle's life when maintenance costs are low, with reduced payments each subsequent year as maintenance costs go up.

LESSEE FINANCE LEASING is a program providing all of the advantages of a lease while using the lessee's line of credit through his own bank at interest rates related to the prime rate.

THE LEE FLEET MANAGEMENT PLAN FOR COMPANY OWNED FLEETS supplies Lee Fleet handling of all the management functions while the company retains title to its own vehicles.

THE BUDGET PLAN, whereby all operating expenses incurred by salesmen are cleared through Lee Fleet for payment and reimbursement. Monthly rental payments include a maintenance budget subject to adjustment up or down at the time of vehicle retirement.

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Focus on Finance

GERALD M. LOEB

Going Public

The headline in the *New York Times* read: "Transitron Shares Rise to $49 as Block Is Marketed at $36." Similar headlines involving "glamor" issues have become quite common lately.

Historically, this situation is far from typical. The tendency has been for the majority of new issues to sell close to their initial offering prices, at least temporarily.

Owners and officers of many privately owned corporations which are likely to go public are puzzled by the premiums being paid for glamor issues. So are investors who rarely catch such quick, profitable moves on the big security exchanges. Even the Securities and Exchange Commission is taking a serious view of the matter.

It seems the influencing conditions vary with each issue. In many cases, they cannot be precisely evaluated.

It should be realized that the pricing of a new issue is a very delicate operation. The aim, for a variety of reasons, is to price the stock slightly below the nearest competitive open-market issue. However, many intangibles enter into the situation. Facts and figures can be evaluated, but public psychology cannot. Very often with a brand new issue, the public's desire to pay a premium for becoming a partner in the management will send a stock initially above estimated statistical values. Many times, the premium will be justified six months later by an upswing in earnings or other change.

One of the most popular issues of all time, the first Ford offering, was made by the Ford Foundation in January 1956 at $64.50 a share. The sheer magic of the Ford name attracted an unprecedented number of buyers, a great proportion of whom were not investment-wise. The stock went above $70 the first day but by 1957 sank under $36. During 1959, however, it surpassed its previous high.

It is reasonable to presume that when the issue was first offered, the Foundation wanted a fair market price or something less, based on the outlook for the automobile business in general and Ford in particular. Since the Foundation had additional shares to liquidate as time went on, it was to its advantage to sell shares at a 5 to 10 per cent discount and establish a reputation for successful financing.

My assumption is that uncontrolled public enthusiasm caused the Ford premium, and changes in economic conditions led to the stock's subsequent decline and recovery.

In the case of Upjohn, Inc., another prominent company that went public, the stock was possibly fully priced on its initial offering. In this instance, outside conditions were not important enough to affect the price trend of the new shares. The stock has been selling near or below its initial offering price.

Judging the climate

Naturally, all new offerings are priced in competition with seasoned issues. The market climate at the time can make all the difference. Electronic shares are in popular favor today, and the sale of a new issue generally benefits from this. A change in this favorable climate could make pricing, which is in line now, wholly incorrect later. And it makes a great deal of difference who does the selling—majority stockholders, the company treasury, or both.

There is always the problem, too, of judging the relative consideration deserved by the old stockholders and the new. Where initial pricing is off the mark, some interests are inevitably damaged while others benefit.

Management compensation enters into a number of situations where companies go public. This has involved stock or warrants optioned or sold at negotiated prices. Often, the arrangements are completed before the stock is offered publicly.

What is the cost of going public? It varies a great deal. The bigger and better known the company, and the more satisfactory its earnings and financial record, the lower the cost. It can be very moderate indeed. Costs of floating Ford, Atlantic & Pacific Tea Company, and Upjohn amounted to 2.7, 3.7, and 3.7 per cent respectively. For companies that are small, new, and unknown, costs are higher. For example, the public paid $6.9 million in all for ten recent glamor issues, the underwriters' compensation was $1.1 million, and the companies and/or selling stockholders retained $5.8 million. Costs in these cases amounted to 16 per cent of the gross proceeds to the selling companies or stockholders.

However, in the smaller and newer offerings, additional underwriting compensation or profit is usually involved. A realistic estimate of the additional underwriting cost is practically impossible to make. These fringe costs

- ★ *Premium prices paid for glamor issues point up the problems of going public.*
- ★ *Stock market forecast: Variable, localized changes but no major storms.*
- ★ *Tax inequities are reducing market values and putting the freeze on investment capital.*

consist of granting underwriters option warrants, the right to buy blocks at a discount, and so on.

Many had assumed such special compensation was subject only to capital gains taxes, but last September a new regulation sent underwriters, dealers, and brokers scurrying to their lawyers and tax consultants for interpretations. Indications are that the entire matter will have to go to the courts before anyone knows where he stands.

It is obvious that it is not easy to go public and, at the same time, offer advantages to everyone concerned. To do it at the lowest possible cost means familiarizing the financial fraternity and investors with the company, its products, and past financial record. It also involves studying carefully the various types of capitalization, underwriting, and distribution procedures.

Another 1929?

More than 30 years have passed since that Black Thursday in 1929, yet speculation about the possibility of a similar financial calamity is still good for pages of type and hours of talk.

The public seems to think of 1929 as exclusively a stock market disaster. As a matter of fact, it was not. The market "crash" made the headlines in 1929, but actually there was an overall business recession and price deflation that adversely affected the value of everything—except money. Here was a true bull market for dollars. Currency became sound. The dollar became really "hard." Inflation was not only checked but turned into deflation.

The most important bar to another 1929 would be the achievement of a stable dollar. Monetary stability would make long-term contracts constant and would insure that changes in the economic climate would not bring unequal advantages to one party or the other. It would make business profits entirely realistic. People would not be paying taxes on profits, capital gains, and wage increases that were unreal to the extent of dollar depreciation. Our ability to compete in world trade would be enhanced. And, of course, the violent effect of inflation and deflation on the stock market would be cushioned.

Without a stable dollar, as observers of currency and market trends abroad know, anything is possible—even another 1929.

But leaving aside this question of dollar stability, the prospects are that individual groups rather than the total market will suffer ups and downs in the years ahead. The modern business weather map is a varied one. In 1959, for example, it was "sunny" in the electronics industry but "stormy" in oil and airplanes.

In general, here is what I think is in store for us: A stock market with many simultaneous new highs and new lows, concurrent uptrends and downtrends, and pluses and minuses. However, there will be times when changes in important factors such as money rates will cause over-all movements. So far as one can see now, they should be orderly. The bond market, for instance, has had a big decline in recent years but an orderly one.

We will not have another 1929 if we keep our dollar stable and if the corporate franchise to enjoy reasonable earning power is not taken away.

Tax Justice

Taxes originally were levied to raise money. As time went on, side effects apparently became inevitable. Their impact on the social structure has been accepted. Their unfavorable effect on normal market values and investment capital is just beginning to be understood.

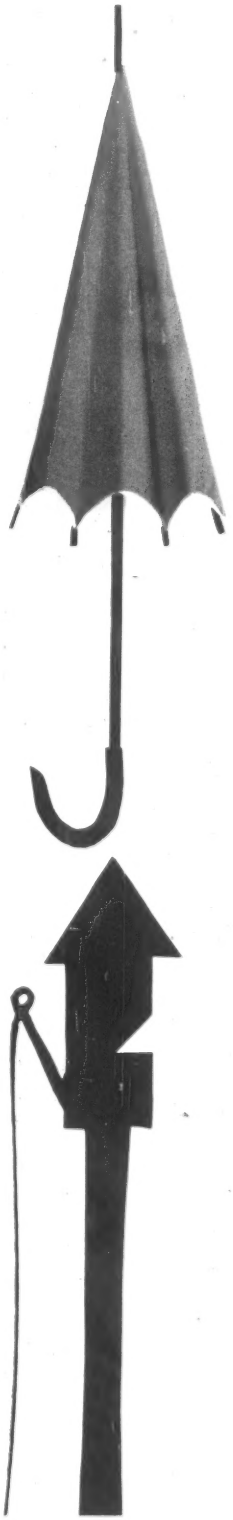
Back in 1954, the tax law was modified to allow the home owner who sold his house at a profit to apply the entire proceeds to the purchase of a new home within one year and defer payment of taxes on the capital gain.

This came about because, as people moved their place of business, they were forced to move their residence as well. The existing inflation resulted in a tax on an illusory gain. The net loss after taxes meant the seller was forced either to buy a smaller home in the new location or add new money to buy a home comparable to what he had before.

Sometimes, it is possible to effect an exchange of property and postpone the tax until ultimate liquidation for cash. This privilege is available under the tax-free reorganization sections of the Internal Revenue Code.

The tax department permits regulated investment companies to acquire smaller investment concerns. These are often privately owned. One William Street Fund, a prominent open-end investment company, was

Don't open



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born via initial purchase of the $96 million holdings of the Aurora Corp., owned by 28 Ford executives. The tax base of the One William shares received by the executives were the same as the bases for the securities in the Aurora portfolio.

Tax justice rightly permitted the companies to benefit from the security exchange. The sellers receive marketable securities for unmarketable ones. No immediate tax is involved, and the taxpayers' liquidity is improved.

Real estate investors know that "like properties" can be exchanged for "like properties" without a tax. For example, if Mr. Jones exchanges real estate with an adjusted cost basis of $10,000 and a present market value of $20,000 for real property with a value of $18,000 and receives $2,000 to "even up" the deal, his gain is $10,000, but he pays a tax currently only on the $2,000. Of course, the basic character of the property is important. The tax department checks to see whether the end use of both properties is alike.

More recently, Congress has come to see the need to unfreeze certain classes of Government bonds. Exchanges of one Government bond for another in some cases are tax-free. The tax is postponed until a final sale for cash is made. The exchange does not alter the capital gains period. The final sale is calculated from the date of the original purchase.

It remains for this principle to be applied to the stock market. It is the most important single move the Government can make to help stock prices seek their natural levels determined by supply and demand. Today, many high-priced blue chips are in artificially short supply because holders who feel they are overvalued cannot afford to liquidate and pay the tax. Likewise, there are many underpriced equities into which investors would like to switch, but the stocks remain underpriced because the funds needed for purchases are frozen by the tax. If investors could apply the proceeds received when a security is sold, tax-deferred, against the purchase of another equity, a basic tax injustice would be removed.

Investors are being unduly penalized by the present capital gains tax. Penalizing investors indirectly penalizes industries requiring new capital. A correction of the law would be an important step toward encouraging the growth of the economy. END

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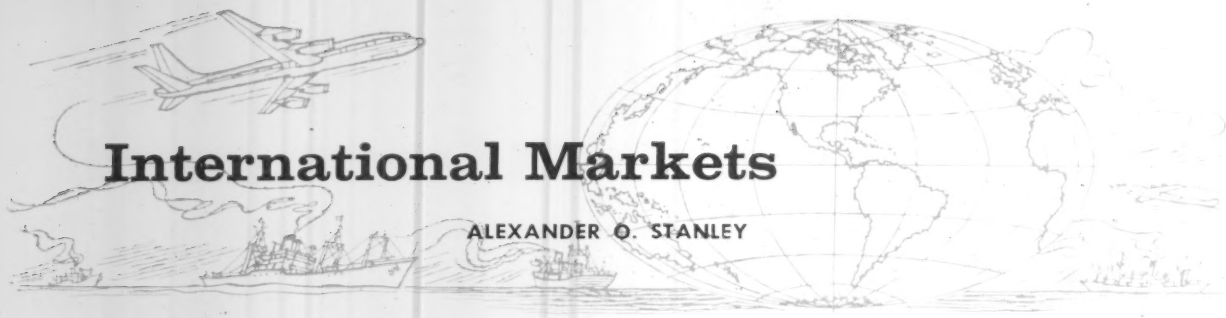


International Markets

ALEXANDER O. STANLEY

- *Despite tougher competition, survey shows U.S. manufactured exports are holding their share of world markets.*
- *Wales, Norway, and India woo investors, while fresh U.S. capital pours in to the European Common Market.*
- *Communist currencies go convertible, and Moscow adopts buy-now-pay-later plan for consumers.*

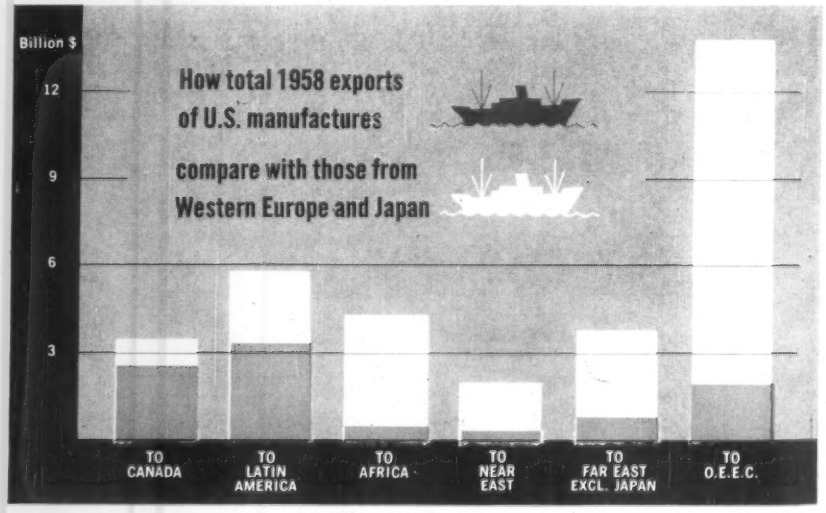
How Exports Shape Up

Caught in a crossfire between American management's contention that its goods are being priced out of world markets because of spiraling costs, and academic opinion that cyclical and underlying conditions actually were responsible for the downtrend in exports, the U.S. Bureau of Foreign Commerce (BFC) has made its own statistical investigation into why and where our competitive position has deteriorated.

Basic data examined were drawn largely from U.N. sources and included comparative figures on manufactured goods exported by the United States and its prime competitors in world markets from 1954 to 1958. The regions reviewed were Canada (our No. 1 export market), Latin America, Western Europe, the Middle East, the Far East (except Japan), and Africa. The product mix was separated into 45 broad groups of commodities that make up 90 per cent of U.S. manufacture exports, excluding processed foods, fats and oils, and petroleum products. Here are the findings:

- Despite some decline in the overall share of U.S. exports, sales of most U.S. products to most markets have held steady. This product mix was down $511 million against the 1954–56 base. It accounted for $7.5 billion of the $17.8 billion racked up in all categories of exports.
- Deepest inroads were made in comparatively few classes of goods. Biggest shrinkages in the U.S. share were in motor vehicles, down $305 million to $966 million; iron and steel, down $112 million to $570 million; aircraft, down $66 million to $185 million; and ships and other vehicles, down $25 million to $105 million. These four categories accounted for almost the entire dollar decline.
- Fifteen categories, comprising a bit more than 50 cents of every dollar in export manufactures, showed only a minuscule downward drift or stayed at dead center. In this block were fabrics (cotton and other), paper, pharmaceuticals, miscellaneous and organic chemicals, manufactured fertilizers, pigments and paints, rubber, and a broad range of machinery, parts, and appliances. Largest and most typical of these strong export categories was industrial machinery, which tallied $1.4 billion of the 1958 exports and showed a drop of only $27 million against the 1954–56 base.
- The best export showings were made by copper, up $50 million to $194 million; railway vehicles, up $43 million to $184 million; inorganic chemicals, up $30 million to $143 million; textile yarns and manufactures, up $24 million to $148 million; and non-ferrous base metals, up $8 million to $78 million. This bloc represented 10 cents out of every dollar of U.S. export manufactures. Some

The Big Picture



U.S. Bureau of Foreign Commerce, International Economic Analysis Division

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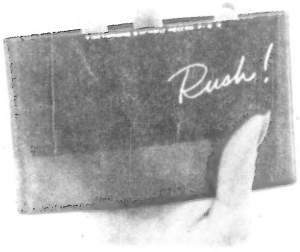

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THE SHORTEST DISTANCE BETWEEN IDEA AND ACTION . . . **Dictaphone®** CORPORATION

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NATIONAL STEEL BUILDS FOR THE FUTURE

with a $300 million program now in full swing to produce more of the products most in demand

A new expansion program already well underway will enable National Steel to produce and market more of America's most wanted steels—and to make them significantly better.

CONTINUING A POSTWAR POLICY. This program calls for the expenditure of $300 million over a three-year period. It follows hard on the heels of a $500 million investment in plant improvements and new properties which began in 1952. The current program will further broaden our share of the market and consolidate our position in the front rank of the nation's steel companies. Let's look at some of the major developments involved.

A "MILL OF THE FUTURE." National Steel's Great Lakes Corporation in Detroit is a major supplier of hot- and cold-rolled sheets and strip in the automotive industry, America's biggest steel customer. Here, we've started work on a "mill of the future"—an 80-inch, four-high continuous strip mill which will be the fastest and most powerful facility of its kind in existence. We'll supply to our car-building customers larger coils of sheet steel of the highest quality. And also at Great Lakes Steel, we're increasing ingot capacity by 500,000 tons to 4.2 million tons a year for this division alone.

A NEW KIND OF PLANT FOR A NEW DIVISION. On a 750-acre tract at Portage, Indiana, on the Lake Michigan shore, we're building a totally new plant for our newest division, Midwest Steel Corporation. From it will roll electrolytic tin plate, galvanized sheet steel and other flat rolled products for manufacturers in mid-America —one of the nation's largest consuming districts. These products will be finished from hot-rolled coils to be supplied by our Detroit operations.

STILL MORE TIN PLATE CAPACITY. At our Weirton Steel Company plants in Weirton, West Virginia, and Steubenville, Ohio, we've installed two continuous annealing lines and two electrolytic tin plate lines to increase production and improve the processing of tin plate. Weirton Steel already is one of the world's largest tin plate producers. Other improvements include facilities to increase the production of cold-rolled sheets.

OTHER NEW CONSTRUCTION. A new 48-inch coating line is being installed at Allentown, Pennsylvania, for our Enamelstrip Corporation, which produces a line of decorative plastic and enamel pre-coated steels in coils. At Terre Haute, Indiana, we have enlarged existing plant facilities and completed an addition for our Stran-Steel Corporation, producer of pre-engineered buildings and architectural products.

ACCELERATING RESEARCH. Backstopping all this expansion, we are constructing a new corporation-wide research center at Weirton, where National Steel scientists will accelerate their search for new and better materials, methods and products.

This continued emphasis on facilities for producing more and better products for our customers has made National Steel the fifth-ranked American steel producer and a major supplier of the steels most in demand.

We are convinced that there will be more dramatic advances in the steel industry's future than in its past—advances in which National Steel intends to play a prominent part.

NATIONAL STEEL CORPORATION

Grant Building, Pittsburgh, Pennsylvania

Major Divisions: Great Lakes Steel Corporation • Weirton Steel Company
Midwest Steel Corporation • Stran-Steel Corporation • Enamelstrip Corporation
The Hanna Furnace Corporation • National Steel Products Company

slight improvement was seen in specialty chemicals, scientific and other instruments, metal manufactures, and metalworking machinery.

• From an area standpoint, the United States did well in its exports to Latin America. Here, our 1958 sales, in a contratrend, went up modestly to give a small edge over the 1954–56 base. Sales to Canada took a slight dip, but both here and in Latin America, the United States remained the predominant supplier (see chart on page 92).

• The most dismal showings were in Africa, the Far East (excluding Japan), the Middle East, and Western Europe, in that order, where our relatively small share was battered down by the export drive of resurgent Western Europe and Japan. Here, two countries, West Germany and Japan, racked up the best gains at our expense. In fact, in the over-all picture, they took over roughly 60 cents in every dollar of our lost export sales.

Although the results of the changing export pattern are obvious, the reasons are more obscure. Some of the conditions which shaped this new pattern can be changed. Others are difficult, if not impossible, to alter. The report suggests that these are the correctible conditions: prices, product designs, delivery lags, credit terms and availability, sales efforts and effectiveness. Tougher to overcome are the facts that traditionally Western Europe, the Middle East, and Africa have been within the international trade orbit of Western Europe and especially West Germany, and the Far East has been the traditional market for Japan.

U.S. Government circles are now mulling over plans to provide six-month credit guarantees to stimulate exports and to equate the advantages held by overseas competitors whose governments provide such credit aid. The Export-Import Bank of Washington already has such authority, but it has been disinclined to support this type of program. The Government may pressure the Exim Bank to underwrite the short-term guarantees or ask Congress to graft this program on some other existing agency. Or it may possibly consider other plans in which private interests would participate (see DUN'S REVIEW, November 1959, page 97).

As to our overseas sales efforts, the comments of Henry J. Kearns, Assistant Secretary of International Affairs for the U.S. Department of Commerce, are worth noting. "It's [ineffective] sales methods, not high prices, that have caused the decline in sales of U.S. products abroad," he said, in summing up his observations on a ten-country tour of the Far and Middle East. He especially noted one glaring weakness: the tendency of U.S. companies to dilute their sales efforts by working through distributors who are already carrying a heavy load of foreign brands.

But while searching appraisals are being made of our competitive posture abroad, the export statistics continue to make poor reading. After showing some signs of recovery in the third quarter 1959, exports dipped again in November, off 8 per cent from the comparable 1958 level. It seems obvious now that U.S. companies will have to fight hard and will need every Government aid and inducement to hold their markets overseas in 1960, especially in politically explosive Latin America.

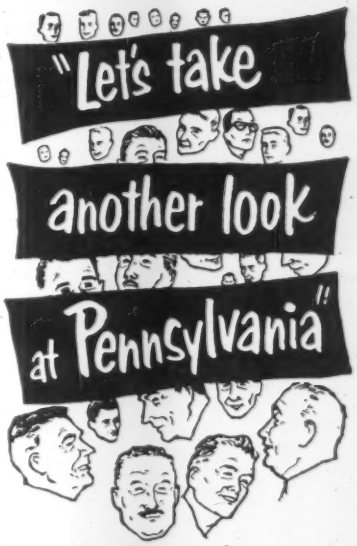
New Lures for Investors

Overseas investment opportunities galore are opening up to American management in all business areas. The spur to industrial transplants abroad is partly in new trends, partly in new regulations. Here are some of the recent investment developments:

• Alert to the challenge and opportunities posed by the new mass market of the European Economic Community (EEC) with its 170 million potential customers, more and more American companies have established or plan to establish operational bases in the EEC. Data flowing into the U.S. Department of Commerce show that the U.S. direct investments in the EEC are increasing at a rate faster than in other parts of Western Europe. Value of investments in the Common Market have almost tripled since 1950. By the second quarter 1959, nearly $2 billion of U.S. working capital was deployed in this area.

Almost two-thirds of U.S capital funds or $1.2 billion were lodged in roughly equal shares in West Germany and France. Italy and the Netherlands accounted for another half billion dollars in investments and Belgium accounted for slightly under $200 million. Luxembourg, the small sixth partner, was repository for a modest $7 million.

An interesting sidelight to this



...that's what a growing number of industrial executives are saying and doing!

During the past three and a half years, they announced

307 NEW PLANTS
258 RE-OPENINGS OF IDLE PLANTS
666 PLANT EXPANSIONS

(Send for the list—address below)

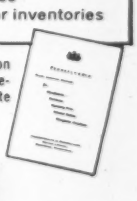
They are finding:

Surplus of industry-minded workers . . . Strategic locations in the great Eastern market with access to major trunk line railroads, and modern highway and Turnpike networks . . . Ports on the Atlantic, St. Lawrence Seaway and Ohio River system . . . All types of industrial raw materials and components . . . 100% low-interest plant financing in labor surplus areas . . . Choice of industrial "parks" and individual plant sites.

In Terms of Taxes:

- No state property tax
- No state tax on personal income
- Manufacturing exemption for capital stock and franchise taxes
- Low local property taxes
- No tax on machinery or inventories

For free copy of "Plant Location Services" pamphlet, or for details on 100% financing, write or call:

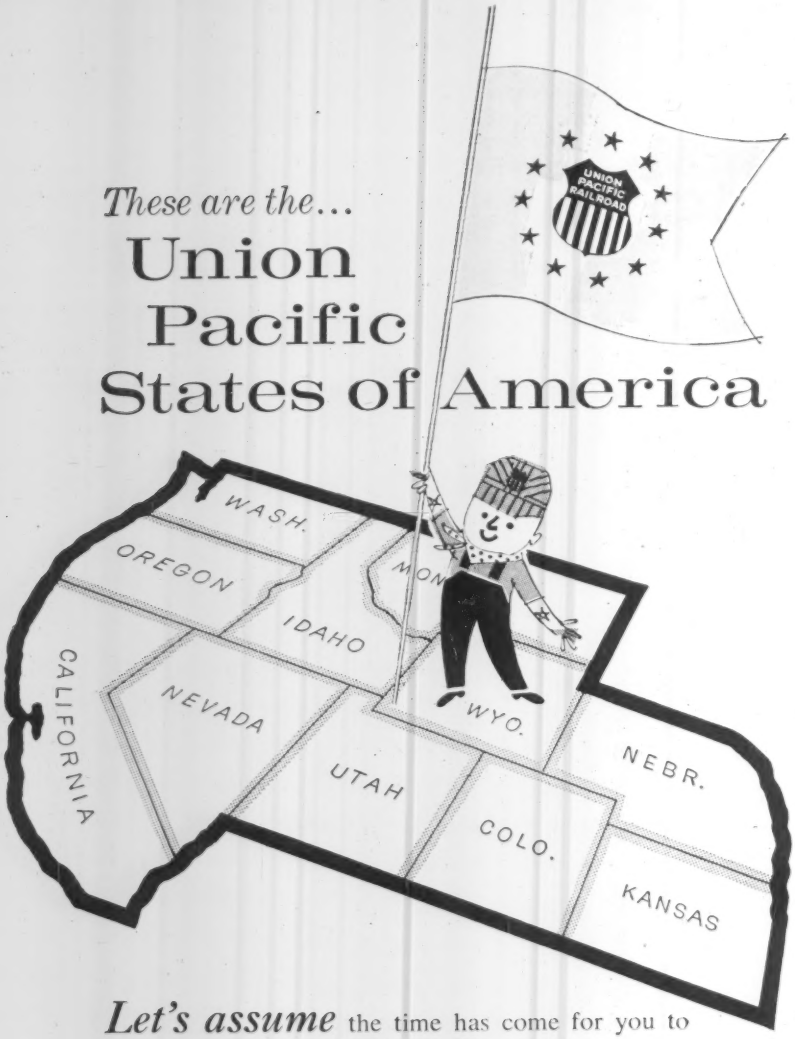


Pennsylvania Department of Commerce

South Office Building
681 State Street, Harrisburg, Pa.
Phone: CEdar 4-2912

These are the...

Union Pacific States of America



Let's assume the time has come for you to seek another plant site. It's a BIG problem . . . what are you going to do?

Here's an idea: In the Union Pacific States of America (11 western states that have just about everything industry needs) you are almost sure to find a plant site that's literally made to order for you.

So why not tell us what you have in mind? We, in turn, will advise what's available in the Union Pacific States. Simple!—and there's no obligation. Just get in touch with your nearest U.P. representative or address—

Industrial Development Dept.

UNION PACIFIC

Railroad

OMAHA 2, NEBRASKA

swelling investment total is that it is only partly financed by direct capital transfers from the United States. Reinvestment of earnings abroad and new capital flotations within foreign capital markets make up most of the fresh capital injected in the EEC.

• Not to be outdone in bidding for foreign capital, Wales and Norway, both members of the European Free Trade Association (EFTA), Europe's other customs union, have recently opened drives in the United States. Using the soft sell, Wales puts some emphasis on scenic beauty as an asset, pointing out that where investment advantages are equal, as it claims for itself, some thought should be given to intangibles such as the enchanting valleys, the thousand-mile coastline, the wide range of sport facilities provided by Wales. Another plus factor is the nearby British market with its 52 million customers. Taking a more practical tack, Norway "expects to get nothing because of its blue eyes, its midnight sun, or its wonderful scenery," according to Trygve Lie, former U.N. Secretary General, now spearheading the Norwegian drive to attract foreign capital. But he expects new industries will take root in Norway not so much to serve its modest market of 3.5 million customers as to gain access to the larger 90 million consumer market implicit in the new EFTA, which Norway has joined as an economic partner with Britain, Sweden, Denmark, Austria, Switzerland, and Portugal.

• India is pushing its own program to spur investments. A new treaty pending ratification by the U.S. Congress would provide these major concessions to U.S. business investors:

1. Income earned as a result of special tax exemptions by India would be free of U.S. taxes.

2. During the first five years of a new industrial investment, returns up to 6 per cent on capital would be tax exempt.

3. New capital investments would be depreciated at 25 per cent more than the normal write-offs for an eight-year period and would also be free of U.S. tax loads.

4. Certain exemptions would also be available on the so-called "super tax" on dividends received by corporate shareholders in Indian subsidiaries of foreign companies. These exemptions would extend to U.S. tax calculations.

To reinforce the pact, India is pre-

pared to offer compensation guarantees in the event of nationalization that are at least equivalent to the original investment. This is designed to reassure managements that are worried about socialistic trends in the Indian economy.

If it follows this constructive investment pattern and adheres to its policy of unrestricted transferability of dividends and profits, India is likely to get the help it needs.

Reds Copy Capitalists

C-Day (C for convertibility) has come to the Communist bloc nations. For some weeks now, the Communist monies of the Soviet Union, Red China, Albania, Bulgaria, Czechoslovakia, East Germany, Hungary, Poland, Rumania, North Korea, North Vietnam, and Outer Mongolia have been made freely convertible in trade dealings behind the Iron and Bamboo Curtains.

The Communist bloc is obviously unhappy with the barter-type system that has prevailed until now and is hoping this new fiscal alignment will promote a greater trade interchange, not only within but eventually outside the Red economic perimeter. Once the rates of currency exchange are published, it should be easier to judge inter-Communist trade trends.

Deery as they will the principles of free enterprise, the Communists are quick to copy capitalistic techniques. In 1957 when the vogue was multilateral trade and payments arrangements between blocs of Free World countries, such as the Hague Club and the Paris Club, the Communist bloc speedily produced its own Warsaw Club. Now the Soviet trade tacticians are following the shift to currency convertibility taken by most Western European nations.

Moscow has adopted still another capitalistic trade "trick"—instalment selling. Long castigated by Communist purists as an insidious device, credit buying was quietly approved as part of the Soviet trade system several months ago. In one month, credit sales zoomed to 70 million rubles ($17 million at the official rate, $7 million at the more realistic tourist rate), as credit-happy Muscovites rushed to buy radios, television sets, sewing machines, cameras, furs, and clothing on the buy-now-pay-later plan. Authorities are now being pressured to expand the system. END

"MILLION LINE" DESKS BY

H·O·N OFFICE EQUIPMENT

bask in the bright atmosphere that new modular H-O-N desks bring to your private office and work center areas.

animate your office personnel with the color and style of H-O-N desks.

stimulate imaginative performance with the inspiration that H-O-N desks bring.

obtain greater efficiency through the functional features that H-O-N work center arrangements offer.

tailor the units to your space limitations. Get the flexibility of H-O-N modular components.

harmonize or contrast with your office decor through a choice of 7 drawer front colors, 3 top colors, 3 body colors. A first with H-O-N.

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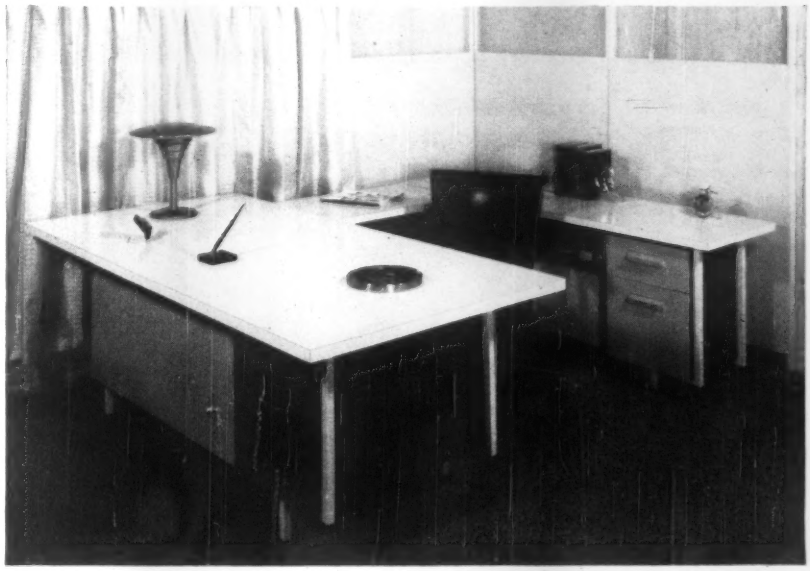
ask us for literature and the name of your local H-O-N dealer. H-O-N Co., Muscatine, Iowa

This U-Shaped work center consists of an H-O-N desk, a side unit, a credenza



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For faster and more efficient postal service, learn the "ABC's" of good mailing habits.

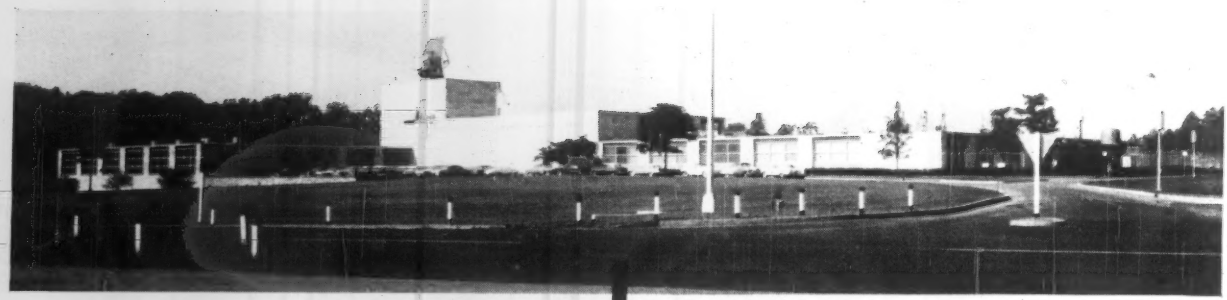
A Postal delivery zone number helps speed your mail.

B Certain to include your return address on all letters and packages.

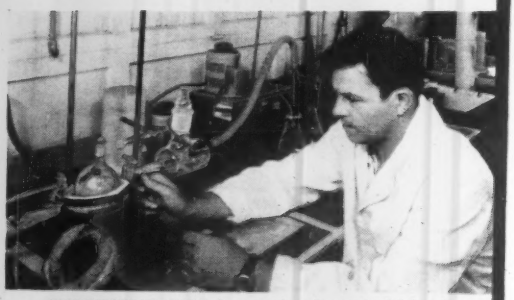
C That the delivery address is correct and complete.

MAIL EARLY IN THE DAY—IT'S THE BETTER WAY!

Melpar, Inc. Expands From 8000 To 1,000,000 Sq. Ft. During Its 14 Years in VIRGINIA



MELPAR'S HEADQUARTERS PLANT, in historic Falls Church, Virginia, has a campus-like atmosphere. Nine other plants are located within a 12-mile radius. A 120,000 sq. ft. addition to the headquarters plant will be completed in September, 1960.



ENGINEERING SKILL is a major factor in Melpar's phenomenal growth. Approximately one-quarter of the company's employees are professional personnel; many have advanced degrees. Melpar's professional personnel enjoy Virginia's cultural, educational, and recreational facilities.

SPACE VEHICLE RE-ENTRY conditions of 20,000 degrees C. can be simulated in a Melpar laboratory. Nearness to Washington, and NASA space base at Wallops Island, Virginia, make the state an ideal site for electronic industries.

Melpar, Inc., a subsidiary of Westinghouse Air Brake Co., provides dramatic evidence that companies grow fast in Virginia! The original Melpar plant in Alexandria, Virginia, contained 8000 sq. ft. of floor space, employed 16 people, had annual sales of $100,000. Today, only 14 years later, Melpar ranks as one of the nation's leading research and development firms in the electronics field. Its 10 plants in Virginia contain nearly 900,000 sq. ft. of floor space. Sales exceed $60,000,000 a year . . . employment exceeds 6,000 people.

Melpar's controlled expansion is proof that Virginia's business climate and strategic location are conducive to rapid, profitable growth. And the fact that 10 Melpar plants are located in Virginia is proof that Melpar is 100% sold on the industrial advantages of the Old Dominion.

Find out why so many growth-minded industries are located in Virginia. Phone, wire, write, or visit in complete confidence . . . C. M. Nicholson, Jr., Commissioner, Division of Industrial Development, Virginia Department of Conservation and Economic Development, State Office Building, Richmond, Virginia, Phone MIlton 4-4111, Ext. 2255.

You, too, can find these... and many other great competitive advantages in **VIRGINIA**

. . . a wonderful place to play or work

Sales & Distribution

New ferment on the retail scene

Manufacturers find leasing helps them sell

Marketing in the 1960's

The massive changes in population and personal income that market planners foresee for the Sixties will inevitably be reflected in new approaches on the retail scene. A new, detailed study of the economy of the 1960's just completed by the Market Planning Corp. concludes that the coming decade will see more changes in marketing than the past 25 years.

Not only will the number of households rise about 25 per cent during the 1960's, but average family income (in today's dollars) will climb to about $10,000—higher than that of six out of seven families today. Equally significant is the expectation that discretionary income (what's left after the necessities are paid for) will almost double between now and 1970.

With one eye on the calendar and the other on the cash register, many retailers are now seeking out new ways to prepare for the booming years ahead. For instance:

- A supermarket chain with 84

Automation Comes to the Supermarket

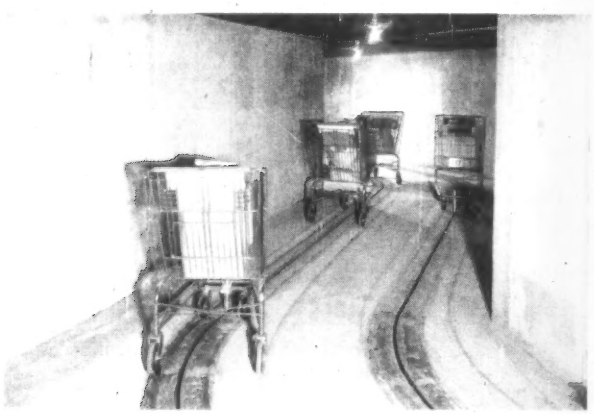
AFTER A SHOPPER'S *purchases are checked out at supermarket, they are put in a shopping cart to be attached to a conveyer.*

By adapting a materials handling technique that is common in industry, the Jewel Tea Company has installed a system that may become standard in supermarkets.

Despite their striking growth in recent years, supermarkets haven't generally fared too well in large suburban shopping centers, largely as a result of parking problems. Good locations with reserved parking areas in shopping centers are now difficult to come by—and surveys have shown that shoppers balk at pushing a cart more than about 200 feet.

Now, by linking the checkout point with the parcel pick-up point by conveyer, the need for directly adjacent parking space is eliminated, thus giving the supermarket chain greater freedom of choice in site selection.

In addition, the conveyer system (which was installed by the Link-Belt Company, Chicago) solves the problem of the wayward shopping cart, which has become so serious that some stores have placed magnets in the ground around the edges of the parking lots to trigger a wheel-locking mechanism.



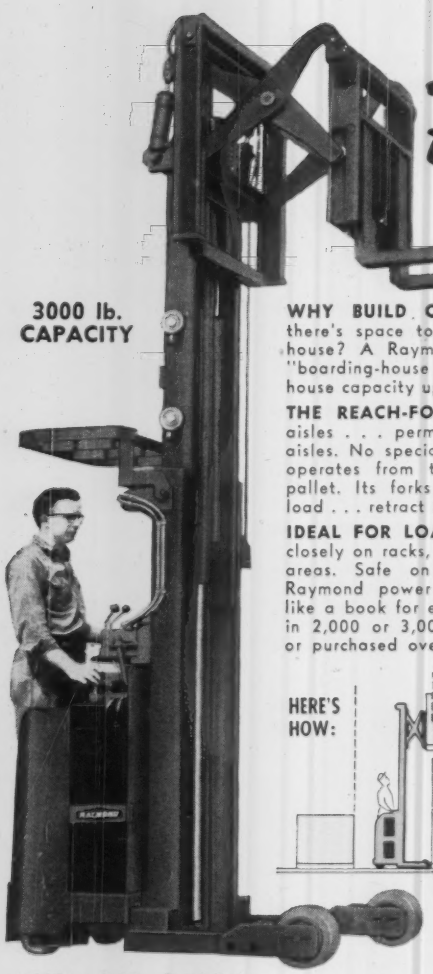
CONNECTED BY STEEL *pins to the conveyer, shopping carts move underground to the parcel-pick-up room 200 feet from the store.*

PARKING *next to the parcel-pick-up room, the shopper claims her cart, and the attendant loads the groceries in the car.*

The truck with "boarding house reach" INCREASES WAREHOUSE CAPACITY . . . as much as 50%

RAYMOND

Reach-Fork
TRADE MARK

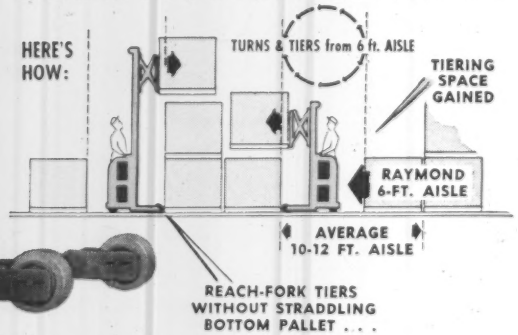


3000 lb. CAPACITY

WHY BUILD OR LEASE additional storage when there's space to be had right in your present warehouse? A Raymond Reach-Fork . . . the truck with "boarding-house reach" . . . may increase your warehouse capacity up to 50%.

THE REACH-FORK eliminates wasteful 10 to 12-ft. aisles . . . permits you to tier in space-saving 6-ft.* aisles. No special racks or pallets required because it operates from the aisle, without straddling bottom pallet. Its forks extend to pick up or deposit your load . . . retract in seconds.

IDEAL FOR LOADING and unloading. Stacks pallets closely on racks, in truck trailers, boxcars, bulk storage areas. Safe on elevators and low-capacity floors. Raymond power unit is highly accessible, opens up like a book for ease in servicing. Reach-Fork available in 2,000 or 3,000 lb. capacities . . . may be leased or purchased over 1 to 3-year periods if you wish.


HERE'S HOW:
TURNS & TIERS from 6 ft. AISLE
TIERING SPACE GAINED
RAYMOND 6-FT. AISLE
AVERAGE 10-12 FT. AISLE
REACH-FORK TIERS WITHOUT STRADDLING BOTTOM PALLET . . .

MODEL E3RT Reach-Fork Electric Tiering Truck. Telescopic model, 3,000 lb. cap.

*For exact aisle width, ask Raymond representative to survey your operation.

THE RAYMOND CORPORATION
4631 Madison St., Greene, N.Y.

MAIL COUPON TODAY

Please send Bulletin on Raymond Reach-Fork. I am interested in:
- ☐ 2,000 lb. cap. Reach-Fork.
- ☐ 3,000 lb. cap. Reach-Fork.
- ☐ Have a representative call.

NAME _____ TITLE _____
COMPANY _____
STREET _____
CITY _____ STATE _____

stores in the New York area is developing a new hybrid—a combination full-size variety store and supermarket. Two 100,000 sq. ft. units are scheduled for opening by Dilbert's Quality Supermarkets, Inc., on Long Island this year, and three others are to follow in 1961.

The company is going ahead with the plans as the result of a test operation in which a Brooklyn variety store was able to triple sales by adding food. The food departments were placed in the rear of the store, and low food prices were used to build traffic around the variety items. (Incidentally, the mark-up on variety items is generally about twice that on food.)

In the five new combination units, about 75 per cent of the space will be devoted to variety items. This will leave about 25,000 sq. ft. in each store for food, which is still considerably more space than typical new supermarkets can boast. These run about 20,000 sq. ft. and devote about 5 per cent of their space to nonfoods.

As the result of this basic change in merchandising, these new combination units will not rely on rack jobbers to supply their nonfood items. Instead, the company will buy directly from the producers and wholesalers of variety goods. All future supermarkets of this chain will be combination units, provided the necessary space is available in good locations.

NEW HYBRID *in retailing—the combination supermarket and variety store (see story).*

• In order to spur impulse buying (which becomes increasingly important as discretionary income rises), supermarket operators are making an exception to the usual practice of keeping all similar items together, and instead are putting related items—such as crackers and cheese, beer and

CHEESE AND BEER *displayed side by side give the impulse buyer menu ideas.*

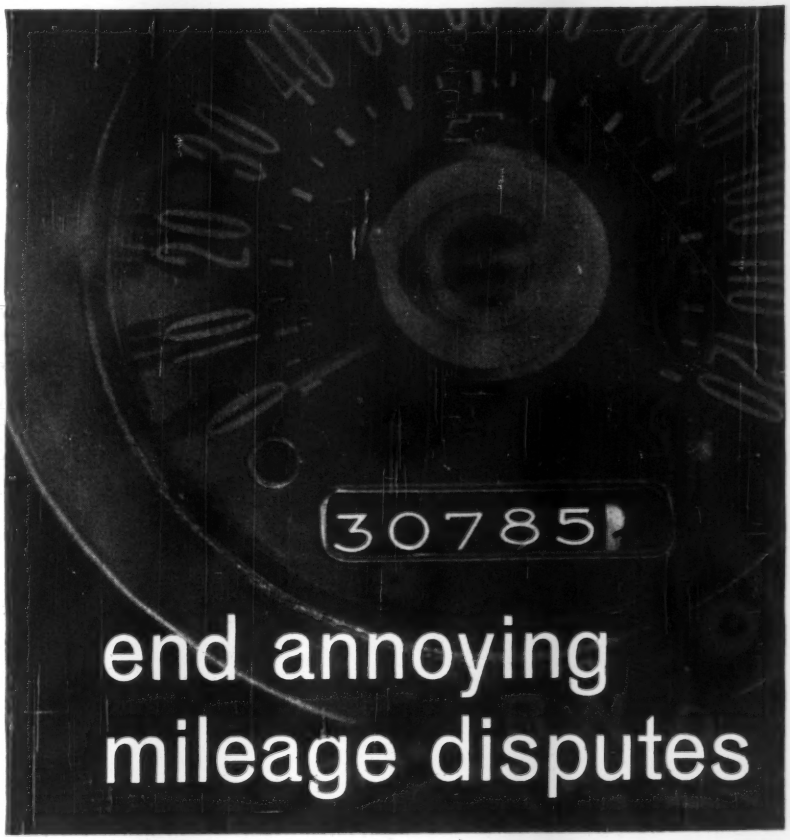
pretzels, franks and sauerkraut—in the same location.

To determine whether this change in merchandising logistics really results in faster turnover for both items when they are offered in combination, West Coast supermarket operators are putting electronic computers to work. Certified Grocers of California—the nation's largest retailer-owned wholesaler—uses its installation of two Burroughs 205 computers primarily for automated billing and inventory control. As a by-product, Certified offers its 1,500 member stores special reports that come up with fast, precise answers to merchandising problems.

• New cars made by competing manufacturers are still among the few products that are not displayed side by side. Surveys have shown that the average car buyer visits almost a half-dozen auto dealers before making a purchase.

This spring, however, will probably accelerate the trend that has developed in recent months toward one-stop shopping for new cars. Across the nation last fall (and in some southern areas during the winter), competing dealers got together to display their latest models side by side in parking lots adjacent to supermarket and shopping centers.

Some marketing experts look ahead to a day when many competing brands of new cars will be shown under one roof. Already the severe competition in the auto industry has been reflected in the burgeoning of the multi-line dealership.



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Let Hertz Car Lease Service take the gripes out of your sales fleet. Hertz will provide new Chevrolets or other fine cars (compact cars, too), handle all repairs and maintenance. You reduce accounting problems to the writing of one budgetable check per month. With Hertz, you have the nation's most experienced car lessor doing all the work!

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Please send me your illustrated booklet, "Who Should Lease Cars . . . and Who Shouldn't."

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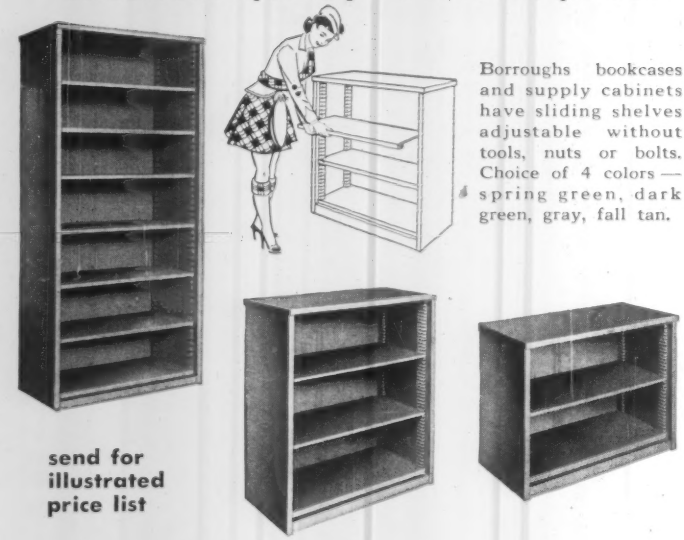
NO. OF CARS OPERATED_____

Q + E = BORROUGHS

"Q" for quality—"E" for economy—both together make top value —and that's what you get in Borroughs cabinets. These handsome, sturdy, efficient cabinets are 36" wide, and come in 4 heights—29", 42", 78", 84"—2 depths—12", 18". The 29" and 42" models are also available with steel or glass sliding doors, and the 78" unit with steel sliding doors.

BORROUGHS
BOOKCASES and SUPPLY CABINETS

excellent quality—sensible prices



Borroughs bookcases and supply cabinets have sliding shelves adjustable without tools, nuts or bolts. Choice of 4 colors — spring green, dark green, gray, fall tan.

send for illustrated price list

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OF KALAMAZOO
A SUBSIDIARY OF THE AMERICAN METAL PRODUCTS COMPANY OF DETROIT
3064 NORTH BURDICK ST. amp® KALAMAZOO, MICHIGAN

300 H.P. LYCOMINGS

LONG RANGE

6-PLACE

NEW SUPER WIDGEON AMPHIBIANS

GANNET AIRCRAFT, INC., DEPT. F-20, 10635 WIXOM ST., SUN VALLEY, CALIF. • TR. 7-0214

• Sears, Roebuck and Company is considering more installations like the telephone shopping service it recently placed in the New York Port Authority Bus Terminal. To catch the busy commuter on the run, the company installed catalogues and phones on which shoppers can place orders for purchases to be delivered to their homes or to be picked up at the telephone counter.

Leasing as a Sales Tool

During the past few years, the leasing of industrial equipment has made important strides as a financial aid to users of such equipment. More recently, producers of industrial and commercial equipment have been demonstrating a growing awareness of the merits of leasing as a sales tool.

Companies have been struck by the fact that even when the total sales of various types of equipment have dropped, the volume of leasing deals has risen steadily in many lines. For instance, at the end of 1957, the York Corp. decided to introduce a lease plan for its commercial refrigeration and air-conditioning line. The first year of the lease plan, 1958, was a poor one, and sales for the entire industry fell off 16 per cent. However, York's sales rose by 10 per cent and its share of the market by 28 per cent. The company attributes the increase solely to the new leasing program.

Bonus business

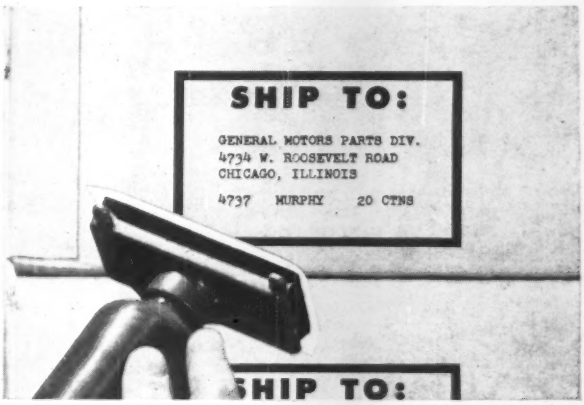
And surprisingly, actual cash sales resulting from original inquiries about leasing were double the volume of lease deals—evidence that lease deals when properly used are a highly effective door-opener. The company says that most of the lease deals were bonus business — sales that would have got away or would not have reached the talking stage without a lease plan.

Leasing, of course, is no way to sell products to companies that are poor credit risks. Says Robert Sheridan, president of Nationwide Leasing Company, Chicago, a company specializing in merchandising - leasing plans: "We will lease equipment only to companies whose credit is such that they could get the equipment on 30-day open account. Leasing isn't a shortcut by which poorly rated companies can acquire equipment they can't afford to buy. Most leasing companies won't lease equipment valued

Are you losing $5,000 to $15,000 A YEAR addressing multiple shipments?

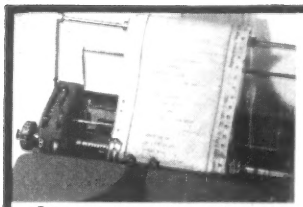
If you regularly address 5 or more cartons per shipment

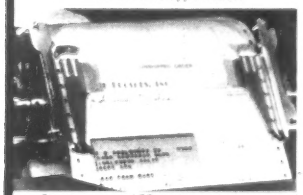
you might be shocked to find out how much it is costing you to address your multiple shipments with antequated, repetitive methods. They are not only time-consuming but are also subject to frequent errors and mis-shipments.



Addressing direct to PANL-LABL on carton is fast and easy.

The Modern STEN·C·LABL* Systems PROVIDE A TWO-WAY SAVING...

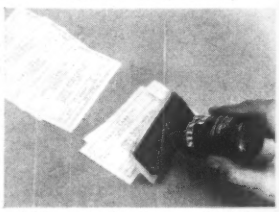

Typing continuous form STEN-C-LABL on electric typewriter.


Typing unit STEN-C-LABLS attached to continuous form on tabulating machine.

❶ As a by-product of office procedure

Your present method of preparing your invoices, orders, bills of lading or shipping papers can also prepare STEN-C-LABLS *at the same time*. Whether you use manual or electric typewriters, electric billing or accounting machines, slave machines or various magnetic tape and punched IDP systems, there's a STEN-C-LABL to fit your requirements.

Addressing direct to carton with die-impressed STEN-C-LABL.


Addressing printed gummed labels.

❷ By making unlimited impressions direct to cartons, labels or tags

With handy squeeze-feed applicator, shipping department makes unlimited impressions direct to PANL-LABL printed on carton at no extra cost. Also addresses gummed labels and tags. Addressing is fast, neat, legible. Laborious, repetitive procedures are eliminated, preventing errors and mis-shipments.

DURABLY MARKED AND PLAINLY LEGIBLE at handling distance. A STEN-C-LABL address is sunproof and waterproof—becomes permanent part of carton. Reproduction is sharp and easy to read at handling distance.

IF YOU HAVE A MULTIPLE SHIPPING PROBLEM

(regularly addressing 5 or more cartons per shipment), you may be able to save thousands of dollars with STEN-C-LABL. Thousands of present users are making substantial savings every year with a STEN-C-LABL System tailored to their requirements.

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Yes, I'd like to know more about saving with STEN-C-LABLS.

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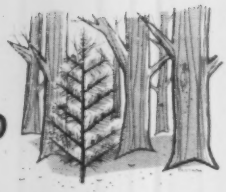
CITY _____ STATE _____



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REPRESENTATIVES IN PRINCIPAL CITIES

at more than one-third of the lessee's net worth."

Among the many companies that have added promotional leasing programs in the past year or two are A. B. Dick Company, Webster Electric Company, Comptometer Corp., and Stewart-Warner Corp.

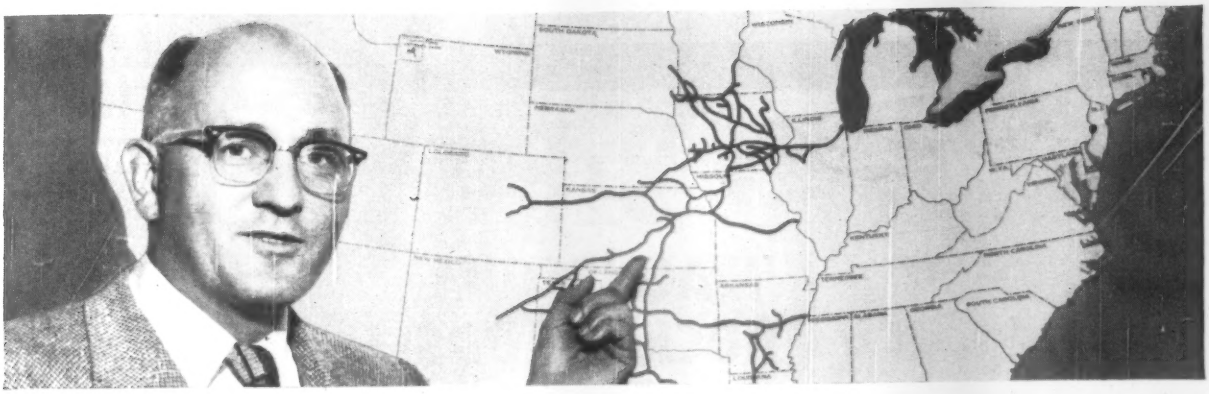
What are the specific benefits of leasing as a sales tool? In addition to the usual financial arguments for leasing—which, particularly during periods of tight money, make a worthwhile addition to the salesmen's kit—companies are discovering these advantages in offering their products on leasing arrangements:

- By reducing price competition, leasing enables the smaller manufacturer to meet or approach the terms of larger competitors.
- Leasing enables the salesman to concentrate on cost savings at one point by comparing the monthly leasing charges with estimated cost reductions produced by new equipment.
- It brings in new business from many regional plants and branches around the country. Reason: local managers, who are not authorized to make capital expenditures, do have authority to pay for improvements out of current operating funds.
- Leasing is an added spur to salesmen who have been using the conditional sales contract. Unlike the latter plan, under which full commission isn't paid until the customer completes his payments for the equipment, leasing gives the salesman his full commission immediately.
- Finally, leasing frees the seller from the conditional liability that exists with the conditional sales contract.

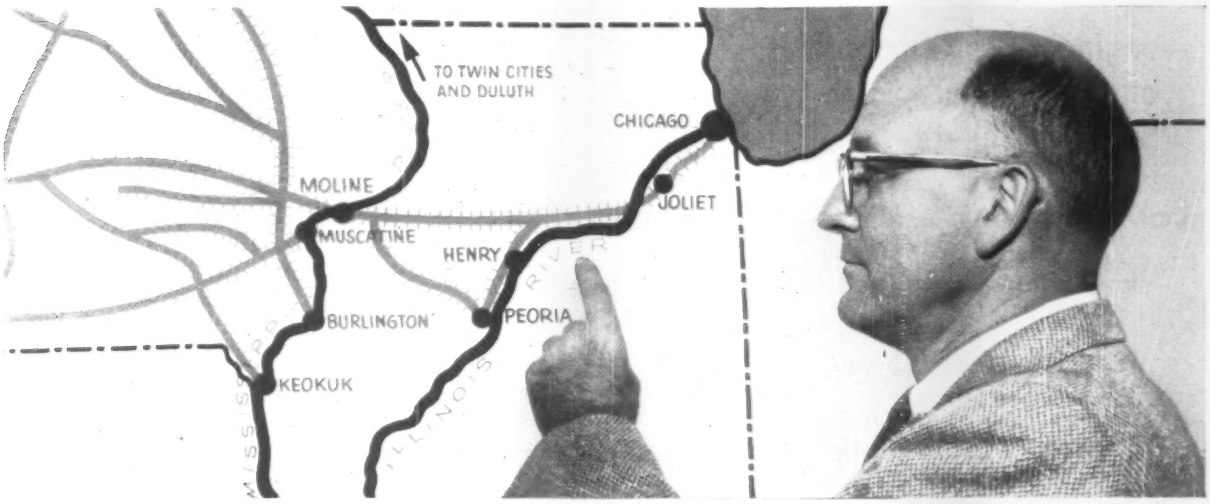
Many companies have successfully put together their own leasing programs, but others are turning to the merchandising leasing company, on the theory that to use leasing effectively as a sales tool requires specialized help. The merchandise leasing concern prepares an entire package of promotional material on leasing, provides sales trainers, and pays full price for the equipment to the manufacturer as soon as each leasing deal is approved. Many sellers of equipment prefer this approach, for:

- It frees funds that would be tied up in leased equipment;
- Service problems don't impede the payments, which are made to a third party, and
- It improves the financial statement.

—T. K.



There's room for you in **ROCK ISLAND COUNTRY...**



E. T. Smith, Industrial Agent, Chicago

for example

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Let Mr. Smith give you all the facts about these splendid waterway locations. He has the tax and labor picture, power and utilities story—all the vital information. He's talking to some of America's biggest companies about these areas. Last year he and other Rock Island specialized personnel like him helped locate 377 industrial installations along Rock Island tracks—a total investment by private industry of $404 million. He'll welcome your inquiry, too. Write, in confidence, to:

Industrial Department 108

ROCK ISLAND LINES

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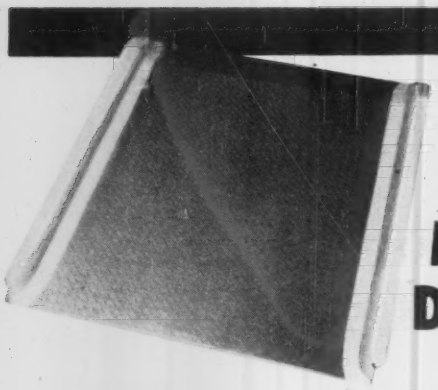

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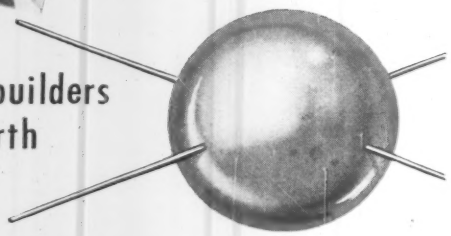

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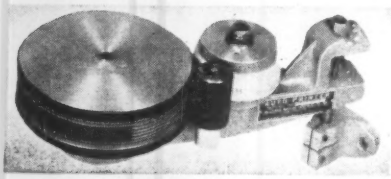

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EXECUTIVE BOOKSHELF

Brief Reviews of New Business Books

Life Can Be Too Safe

LIFE IN THE CRYSTAL PALACE *by Alan Harrington. Alfred A. Knopf, Inc., 501 Madison Ave., New York 22. 263 pages. $4.50*

Granted one man's boredom is another man's security, the author's pointed and often poignant observations on the enervating effects of corporate benevolence shouldn't be dismissed out of hand as just another attack on big business. He may at least have the answer to why some pampered young executives leave home.

High and Dry

CONSERVATIVES IN POWER: A STUDY IN FRUSTRATION *by Edwin L. Dale, Jr. Doubleday & Company, Inc., 575 Madison Ave., New York 22. 214 pages. $3.95.*

An engrossing account of how the conservatives took the helm in 1952, determined to steer the ship of state out of the deep waters of deficit spending—only to find themselves, seven years later, on the shoals of bigger budgets, larger deficits, and continuing inflation. The trouble, says the author, is not so much with the helmsmen as with the prevailing winds.

Lost by Default

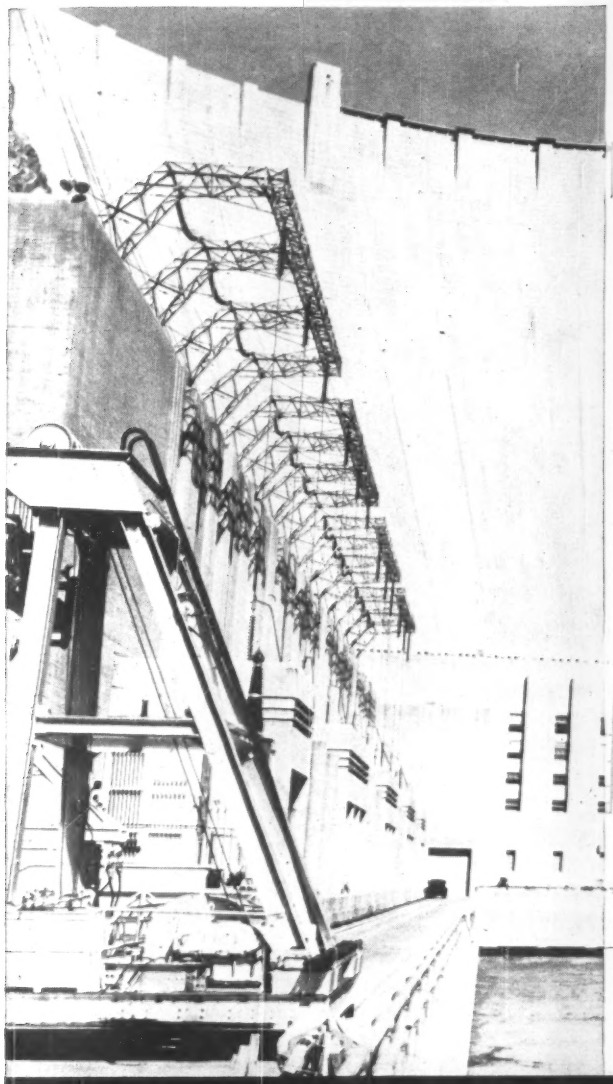
MANAGEMENT'S RIGHT TO MANAGE *by George W. Torrence. The Bureau of National Affairs, Inc., 1231 24th St. N.W., Washington 7, D.C., 109 pages, $12.50.*

Management's rights, the author contends, were not "lost" but "given away" through its own carelessness, ineptness, and lack of courage under fire. He cites arbitration and court decisions to document his charges and to show how management can regain and retain its prerogatives.

Managers the World Over

MANAGEMENT IN THE INDUSTRIAL WORLD: AN INTERNATIONAL ANALYSIS *by Frederick Harbison and Charles A. Myers. McGraw-Hill Book Company, 330 West 42nd St., New York 36. 413 pages. $7.*

A comparison of the nature and development of management as an economic resource, a system of authority, and a social class in the United States and eleven foreign countries. Valuable reading for management students and business men operating abroad.



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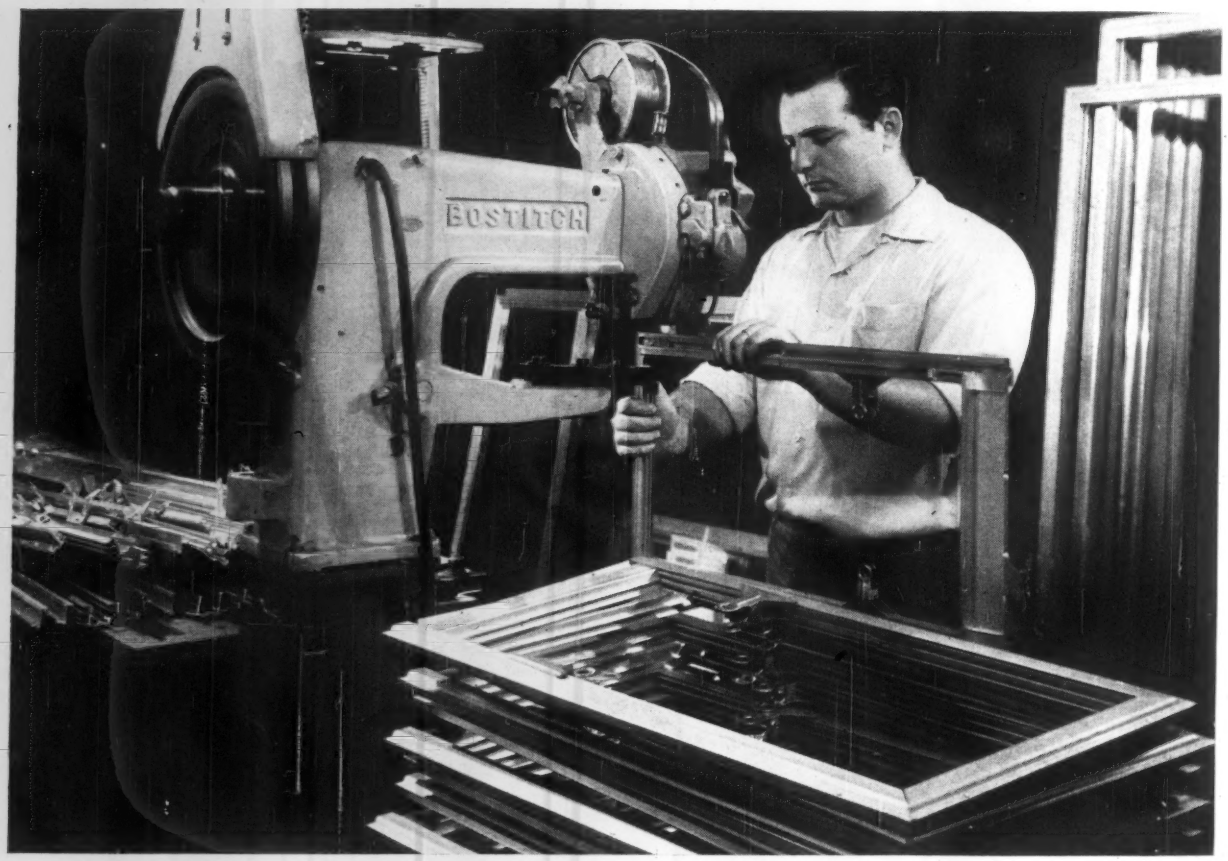

Bostitch shows metal fabricator how to increase production 33%—cut costs 18%—with stapling

Weather Products Corporation of Warwick, R. I., used screws or rivets to join the top and side of triple-track aluminum windows.

A Bostitch Economy Man suggested stapling. Results—production rate rose by a third and manufacturing cost fell 18%. Bostitch staplers eliminated the pre-drilling needed with former method. Stapling is a split-second, single-motion job. And the staples themselves cost less than the fasteners formerly used.

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- ☐ rubber
- ☐ light metals
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I now use _____ (fastening method)
to fasten _____ (material and item)
Name _____
Company _____
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City _____ Zone ___ State _____

Capital Views & Previews

PAUL WOOTON

Secretary Arthur S. Flemming defines industry's stake in social welfare

OF ALL the Government departments and agencies, business is apt to regard the Department of Health, Education, and Welfare as the one of least significance in its planning and operation. Yet, as Secretary Arthur S. Flemming points out, the Department, through its wide range of functions, helps to maintain a vital industrial resource: a healthy, secure, and well-educated workforce.

Arthur S. Flemming

Starting with the first of its three broad areas of activities—health—Flemming ticked off for DUN'S REVIEW the benefits industry derives from the work of his Department. First of all, through Federal sponsorship of medical research, through the enforcement of pure food and drug legislation, and through programs aimed at controlling water and air pollution the general health of the public is maintained at the highest possible level.

The U.S. Public Health Service, which comes under the Department's jurisdiction, conducts more than half of the country's medical research through its research arm, the National Institutes of Health. Congress has appropriated $400 million this year for the Institutes' work, primarily in cancer, heart and mental diseases.

Research aids industry

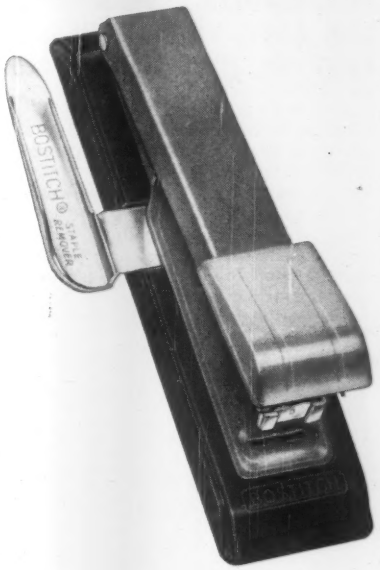
The Public Health Service is responsible for the pollution control programs, which are of vital importance to industry. The Service also is experimenting with methods for the safe disposal of radioactive waste, and a team of experts is studying the risk of radiation exposure in industrial and medical practices. Another study, into the physiological and psychological makeup of people who are involved in accidents of all kinds should provide valuable clues to help industry lower its accident rate.

Secretary Flemming believes the Federal Government has a definite responsibility to safeguard the nation's health. However, he believes the Government's efforts should supplement the activities of the medical profession and local governments.

Education, Flemming contends, is a prime force in maintaining economic and industrial progress. "Business," he adds, "has a greater interest in education than ever before. Technological developments have greatly increased the need for trained minds. The market for unskilled labor is shrinking. Even in commonplace jobs, the demand is for high school graduates."

The role of the Federal Government in education, as Flemming sees it, is to provide national leadership and assistance without dominating or

Versatile★



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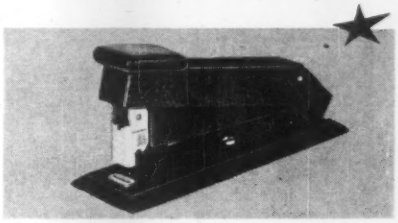

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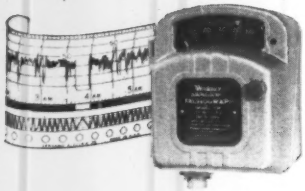

This new model Tachograph permanently records truck operation, on roll-type charts, designed for 8, 15, or a maximum of 31 days.

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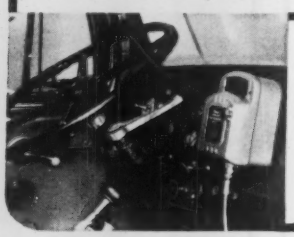
Data helps you plan better routing, curtail wasted time, cut costs, and helps make drivers safety conscious . . . For details, mail the coupon.



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WS60-3

interfering with local school administration.

The United States has lately awakened to shortcomings in its system of education. The Office of Education is working to overcome these shortcomings by cooperating with state governments and by assisting local leaders in promoting needed educational programs, Flemming says.

Welfare as a stabilizer

The third function of the department—providing welfare assistance to the disabled, dependent children, and the older citizens—has not always had the support of the business community. Yet, Secretary Flemming contends, the Government's welfare programs have had a major stabilizing effect on the economy.

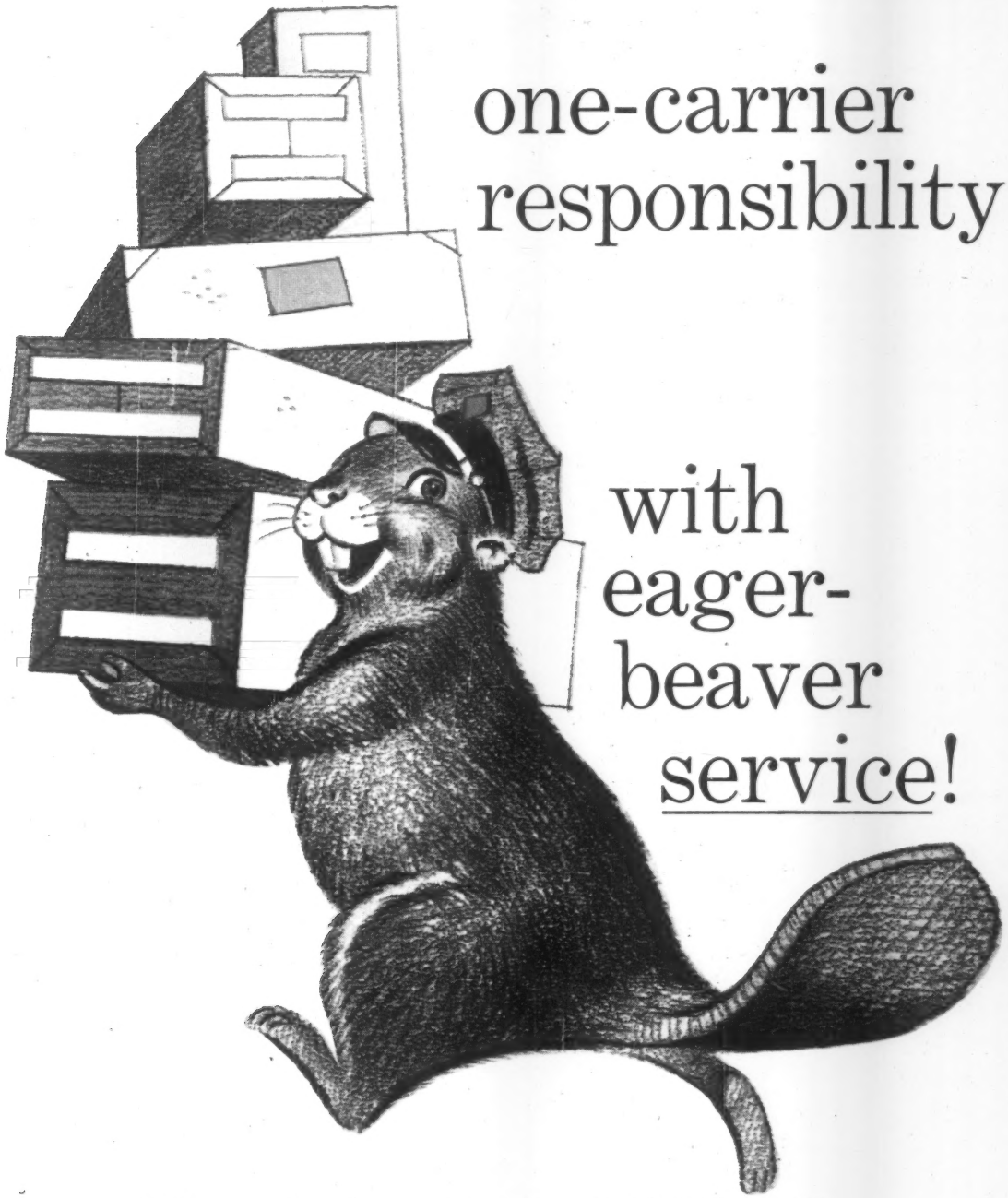
He points out that Social Security payments alone are adding more than $10 billion a year to personal income. In the current fiscal year, about $14.6 billion will be spent for benefits and services to older citizens. In addition, disability payments will amount to $1.7 billion. Public assistance payments to the aged are running about $1.4 billion annually, but total public assistance expenditures are being reduced by finding ways to keep people self-supporting. All of the benefits are supplemented by local assistance.

Nowhere is the Department's motto ("Hope—the anchor of life") better realized than in the work of the Office of Vocational Rehabilitation. In this fiscal year alone, 90,000 handicapped persons have been trained to become productive members of society. The goal of this agency is to increase the number to 200,000 a year. Aside from the humanitarian aspects of this endeavor, the economic benefits to be realized will be a bigger available workforce and higher consumer spending power.

Secretary Flemming has crowded many accomplishments into a span of three decades. He has been a newspaper reporter and editor, a teacher, college president, and Government official.

Of all his past activities, Flemming says, "There are no more exciting areas than health, education, and welfare, and there are few areas that present so many problems. Ours is the great and humane task of helping the American people help themselves toward a healthier, increasingly enlightened, and more secure world."

END



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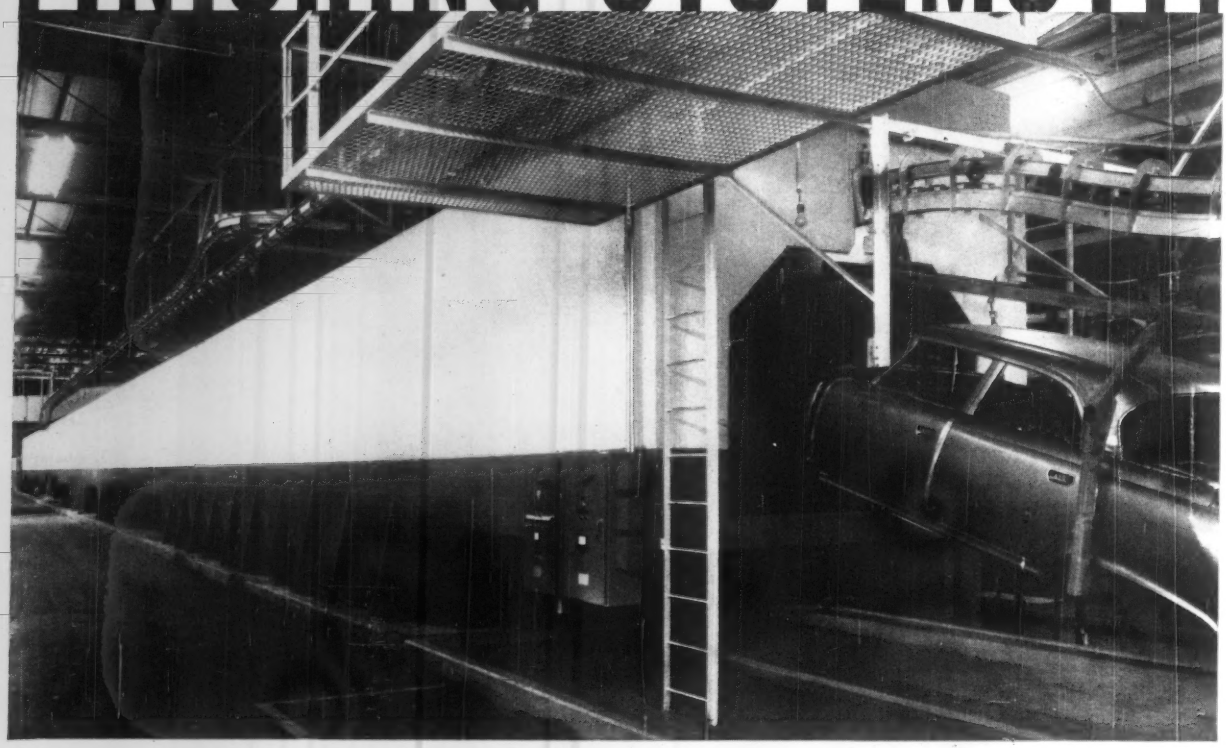
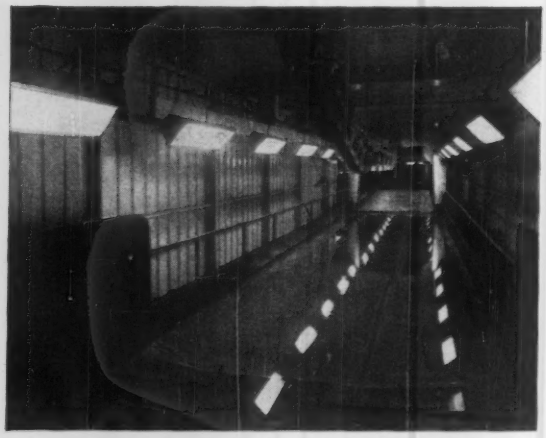


Mahon Six-Stage Combined Dip and Spray Cleaning, Rust Proofing and Surface Preparation Machine.

CHRYSLER of CANADA Installs New Antirust Facilities for BODY FINISHING—Including DIP PRIME COATING!



Primer Dip Tank—9000 Gallons of Water-Reducible, Rust-Inhibiting Primer. Bodies are Immersed to a Depth of 18" and are Soaked in this Rust-Proofing Primer for One Minute and Thirty Seconds.

In the new, conveyorized anticorrosion equipment recently installed by Mahon in the Windsor Plant of Chrysler Corporation of Canada, Limited, the bodies pass through seven operations of Cleaning, Rust Proofing and Dip Prime Coating.

In the first six operations of cleaning and surface preparation, which include a phosphate coating and chromic acid bath, the bodies are subjected to high intensity impinging sprays while immersed to a depth of 18" in the same chemical solutions maintained at prescribed level in long tanks. In the seventh operation the bodies are dipped to a depth of 18" into a 9000 gallon tank of water-reducible, rust-inhibiting primer—bodies soak in this armour-like rustproof primer for one minute and a half to ensure effective coating of all the metal surfaces which would otherwise be inaccessible in the complex configurations of unitized body construction.

When you consider buying a new finishing system, or any unit of finishing or processing equipment, you, too, will want to discuss methods, equipment requirements and possible production layouts with Mahon engineers . . . you'll find them better qualified to advise you, and better qualified to do the initial planning and engineering which plays such an important role in the ultimate operating efficiency of specially designed equipment of this type.

See Sweet's Plant Engineering File for Information and Representative Installations, or Write for Catalogue A-660

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Ideas at Work

- *Task force tackles office waste*
- *Speeding special orders*
- *Central file for legal papers*

Paperwork Sleuths

A ten-man task force assigned to track down and eliminate costly paperwork congestion and waste is saving Northwestern Bell Telephone Company of Omaha, Neb., nearly a million dollars a year.

The task force, known as the Business Procedures Committee, is composed of three three-man teams and a chairman. The members are recruited from every department in the company and are reassigned to their departments after they serve a term on the committee and are replaced.

The committee's objectives are:

- Elimination of duplication and unnecessary work
- Simplification of manual procedures
- Mechanization wherever economical
- Motivation of employees to think in terms of improving procedures

Given a problem, the team first familiarizes itself with the basic operation. Then it contacts area and district heads and obtains permission to observe how a particular office procedure is handled.

The team is interested not only in the job but also in the people doing it. It interviews every person involved and explains exactly what the team is trying to learn. There is nothing secretive about its investigation. As the team members talk with office personnel, they take notes and draw flow charts.

Irv Kuno, chairman of the Business Procedures Committee, says, "We must be sure that our approach is understood by everyone connected with the problem. Otherwise, it is impossible to get all the facts and really complete the job."

After the facts are gathered—and this may take a few days or several weeks—the team really goes to work. It analyzes the flow charts, takes the job completely apart, reassembles it, and develops an improved method. The team's conclusions are then reviewed by the committee chairman. If he approves it, the plan is drawn up

continued on page 114

No Billing Bottleneck

Filling small special orders from retailers often poses time-consuming paperwork problems for the manufacturer.

And for the United States Shoe Company, Cincinnati, the bottleneck was particularly vexing because many of its 3,000 retailers ordered in small lots of eight pairs of shoes or less in order to meet the immediate needs of their individual customers.

To speed the special orders through the paperwork process, the company is now billing at the point of packaging. Two Burroughs billing machines are positioned next to the conveyer that leads to the packaging area (see photo). The filled order with billing information attached is placed on the conveyer and moves to the biller. In one operation, the billing clerk prepares an invoice in triplicate and a shipping label. All extensions and computations are automatic.

When the biller completes her job, she attaches the invoice and the label to the carton, and it moves on its way to the sealing department, where the original copy of the invoice is stuffed inside the carton, the label attached, carton sealed, and the order sent on its way to the retailer. The remaining two copies of the invoice are sent to the front office where they are used for necessary bookkeeping work.

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and presented to the people who will be using it. Usually, team members personally supervise the new operation until it is running smoothly.

By this method, the committee recently devised a way of keeping data on key system equipment on a single record. It cut out typing and transcription errors and saved the company at least a half million dollars annually. The idea has since been adopted by three other Bell companies and is being considered by others.

Results like these justify the committee's annual operating expense of under $100,000, the company believes.

Most of the savings from simplification projects have been in operations performed by employees who are considered "non-clerical" but who may spend much of their time doing paperwork—e.g., service representatives.

The committee is well aware of the natural resistance to change. "But we know," says Chairman Kuno, "That people accept change more readily if they see advantages to themselves in the change. We pretty well know the role machines can play in providing telephone service. The challenge now lies in economies that can be gained in paperwork.

"Naturally, we're trying to save money; that's an important goal. But it has been our experience that one of our most important results has been the creation of less tedious, more interesting jobs."

Documents in Safekeeping

A centralized "lending library" system for filing legal documents is saving time and safeguarding valuable papers at Calumet & Hecla's Wolverine Tube Division, Decatur, Ill.

The system was installed after a survey revealed more than 200 documents legally binding on the company were scattered throughout the Division in files kept by the legal department, the controller's office, and the sales and purchasing departments. Rising sales volume and production expansion threatened to produce even more materials for the files. Searching through this maze for a specific document was a time-consuming and sometimes almost hopeless task.

It was decided, therefore, to revamp the whole procedure of record retention and centralize it in the controller's office, since most of the documents pertained to financial obligations.

The first step was to take an inventory of all legal documents outstanding—deeds, license agreements, leases and rentals, agreements for use of processes and equipment, and purchase and sales contracts. Patents were excluded. These documents were then rounded up and placed in the controller's safe, which became the central file.

The next step was to prepare abstracts of all documents for the use of employees in their daily activities. These summaries were carefully written to avoid confusing legal jargon but to retain such pertinent information as: the name of the other party; date of contract; subject of contract; obligation of the company; obligation of the other party; termination date; provisions for earlier termination; any modifications, amendments, interpretation, and so on.

Copies of all abstracts are sent to the Division manager, the corporate office, and the corporate legal department. The controller's office decides which of the other employees needs to see the abstracts.

Anyone who wishes to remove the original documents from the controller's file must sign a ticket showing who has the document and when it will be returned. The ticket is put in the file in place of the document. Checks are made to make sure the documents are returned on schedule.

Woman's Work

Five women personnel assistants have been assigned to help male supervisors at the John Hancock Mutual Life Insurance Company (Boston) handle the special problems of a predominately female clerical force.

The personnel representatives provide information and assistance to management to insure uniform administration of company personnel policies, determine departmental personnel requirements and fill them, assist with personnel paperwork, and recommend employees for promotion.

But one of their most important jobs is counseling female employees on personal problems and dealing with the emotional outbursts that can unnerve a man.

Managers and department heads whose education and experience are geared to their specialties are well satisfied with the plan, because it al-

lows them to concentrate on the professional aspects of their jobs.

Employee Fact Sheet

Here's a simple way one company has found to keep its personnel files up-to-date. Periodically, the Weirton Steel Company, Weirton, W. Va., runs a Supplemental Personnel Inventory form in its employee publication.

On the form, employees fill in information on education, training, and experience not previously recorded. There is also space for general comments on any problems they may have. The forms when completed are cut out of the publication and sent by inter-office mail to the personnel department.

Product Idea Awards

New product ideas submitted by National Biscuit Company employees through the regular suggestion system can earn them awards up to $3,000.

Roy Kelley, vice president in charge of Nabisco's New Products Division, which was set up only last year, believes the company's 25,000 employees represent an untapped pool of good ideas because of their knowledge of the company, its goals, and its operations.

Safety Contest for Foremen

Foremen, who by personal example and supervision can make a success or failure of a plant safety program, are competing with each other at the Granite City, (Ill.) Steel Company for the title of safety supervisor of the month.

Each month, five foremen are secretly observed and graded on safety leadership, the application of general safety knowledge and first-aid procedures.

The winner gets a night out for himself and his wife—including dinner, a show or some other entertainment, a corsage for his wife, and even a paid baby sitter.

Where We Stand

The company's financial position is no secret to employees of the Oklahoma Gas & Electric Company, Oklahoma City. Regular reports on the stock market in general and OG&E shares in particular are carried in the company house organ. —C. K.

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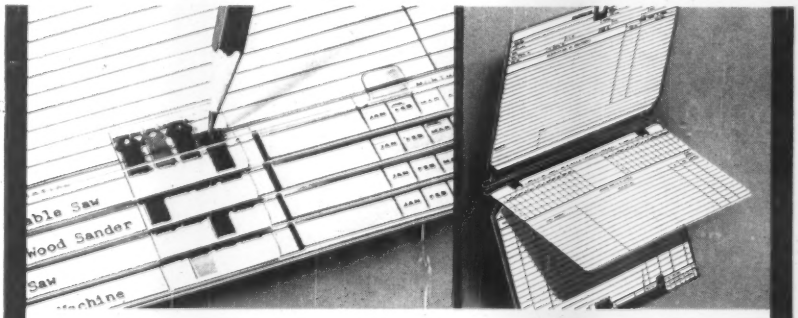
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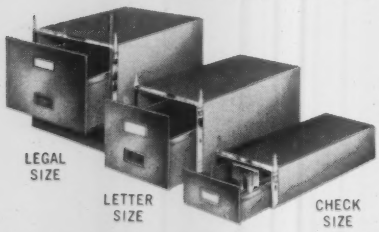

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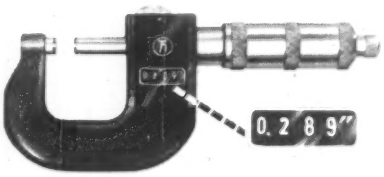
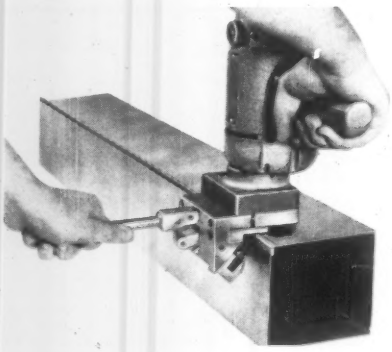
SINGLE-HANDED: The driver pushes a single control stick to move this tractor in any direction. Moving the stick left, right, forward, or backward activates a hydraulic system to clutch, brake, steer, and shift. The control is offered as optional equipment on John Deere "440" Industrial Crawlers. *"Pilot-Touch," Deere & Company, Moline, Ill.*

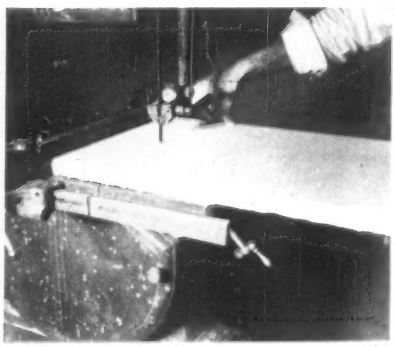
EXACT READINGS: The guesswork is taken out of measuring with this new micrometer which automatically indicates readings on a built-in dial face. The measuring tips are made of tungsten carbide, and the tool is fitted with a friction stop and a lock screw. $35 (small model). *"D. R. Micrometer," Glass Laboratories, Inc., 863 65th St., Brooklyn 20, N.Y.*





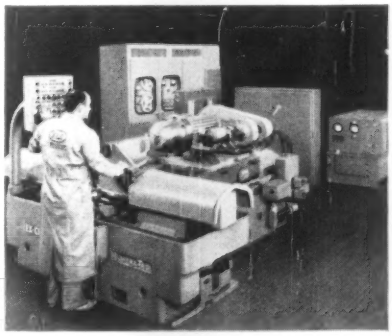
SMOOTH SEAMS: Sheet metal seams are roll-closed with this new portable tool, replacing the slow and noisy hammering method. It seals at speeds ranging from 18 to 30 feet a minute, depending on the thickness of the metal (18 to 28 gauge). Interchangeable slides can seal three sizes of seams. $225. *"Lectro-Lok," Millers Falls Company, Greenfield, Mass.*

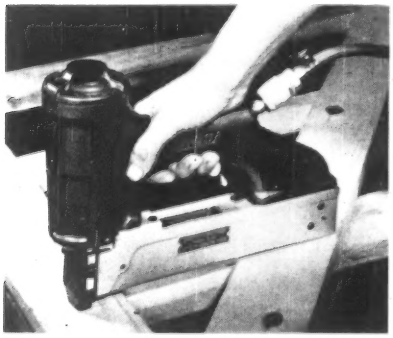
FIREPROOF BOARD: This asbestos board can be sawed, drilled, sanded, machined, or planed like wood to accuracies of .001 inch. The smooth texture of the board requires no finishing. The material will not burn or rot, and is practically unaffected by water, steam, or 1,200° F. temperatures. *"Unarcoboard," Union Asbestos & Rubber Company, Chicago.*



» **THIS MONTH:** *simplified control for tractors; handy measuring aid; new tools and materials for easier maintenance; tougher, more versatile fibers.*

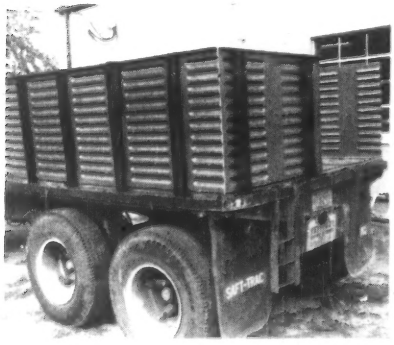
PRECISION: This metalworking machine tool is accurate within 25 millionths of an inch. Its roller bearings are precision-matched, and slide-ways for the extra heavy machine bed are hand-scraped to insure flatness. The 1,000 pound cross slide is moved with only 5½ pounds of pressure. *"Numera-Trol 922," Ex-Cell-O Corp., 1200 Oakman Blvd., Detroit 32.*





AIR POWER: With no recoil, this pneumatic staple gun will drive 1½-inch, 16 gauge staples into wood, fiberboard, and similar hard materials. In addition to speeding up construction operations, the staples are said to have better holding power than long shank nails. *"Duo-Fast S-762," Fastener Corp., 3702 River Road, Franklin Park, Ill.*

TYPE IT CLEAN: Typewriter keys are cleaned simply by typing on a sheet of this new material. It is rolled into the typewriter like a sheet of paper, each key is struck a few times, and the job is done. One sheet provides enough surface for seven cleanings. *Minnesota Mining and Manufacturing Company, Dept. M9-465, 900 Bush Ave., St. Paul 6, Minn.*



PLASTIC PANELS: The panels on this trailer are made of high-impact plastic. They resist denting and breaking, and eliminate the problem of rusting. Painting is unnecessary, and the panels are easily washed, making them suitable for food haulers. Their lighter weight increases the trailer's payload. *"Seilon VHI," Seiberling Rubber Company, Akron 9, Ohio.*

more news on next page

54
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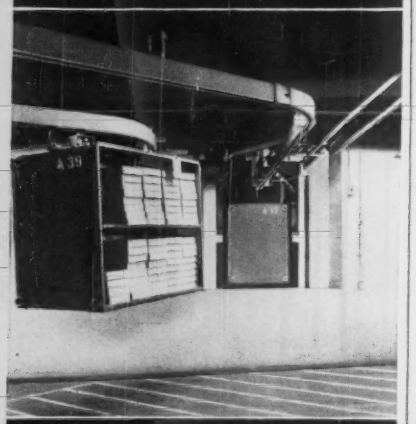

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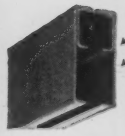

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DRY RUN: Some plant lubrication problems can be eliminated for good by means of new all-plastic bearings. Designed for such diverse applications as electrical devices, food machinery, and materials handling equipment, they can be run completely dry. Tests run on the bearings indicate savings in maintenance costs and considerable reduction in downtime for cleaning and lubricating. *"Roll-Dri," Industrial Plastic Supply Division, Industrial Safety Supply Company, Inc., 574 New Park Ave., West Hartford 10, Conn.*

»

SIZABLE SYNTHETIC: Sections of nylon weighing up to 400 pounds, the largest yet produced, are now available. Nylon in large sizes is expected to find applications as tooling fixtures,

wear plates, rollers, and wherever its corrosion resistance and resilience is desirable. *The Polymer Corp., % Conrad H. Busch, 2120 Fairmont Ave., Reading, Pa.*

»

DOUBLE ACTION: Grease can be applied either in volume or under high pressure with a single gun. A latch pin in the handle shifts from one pressure to the other. In the high position, pressures up to 10,000 psi can be obtained on a ¼-inch stroke. A nozzle extension swivels a full 360°. *Lincoln Engineering Company, 4010 Goodfellow Blvd., St. Louis 20, Mo.*

more news on page 120

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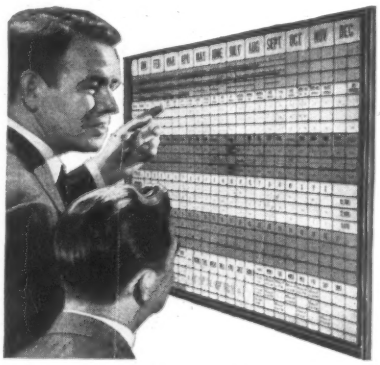

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Finally, every Bond you buy does a big job for America. Because today peace costs money—money for military strength and for science; and money saved by individuals to keep our economy sound.

Your Bonds help provide this money—help America keep the peace. So, to build a brighter future for yourself and your family—and to *protect* it—save with U.S. Savings Bonds. They're better than ever.

HELP STRENGTHEN AMERICA'S PEACE POWER

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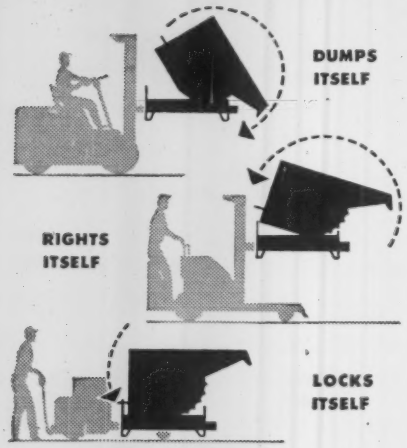

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SANITARY: A new type of concrete floor that kills bacteria and fungus is expected to improve sanitary conditions in food processing plants and hospitals. The germicidal agent, which is insoluble in the concrete, is also said by the manufacturer to reduce floor maintenance costs by killing the bacteria—a source of acid which eats into the floor. *Kalman Floor Company, 110 East 42nd St., New York 17.*

EYES RIGHT: The business end of a new fork-lift truck can be pivoted 90° in either direction, permitting loads to be stacked in aisles as narrow as 6 feet. Hydraulically operated outriggers stabilize the truck during the pivoting operation. Load capacity is 4,000 lbs. *"Model 590," Towmotor Corp., 1226 East 152nd St., Cleveland 10, Ohio.*

FAST DRYING: A new rust-inhibiting primer paint dries to a hard impact-resistant coat in fifteen minutes. Workers can follow up the prime coat with a finish coat immediately, cutting labor costs by one-third, according to the manufacturer. The manufacturer claims the paint adheres well to cold-rolled, smooth, and highly polished steel. *"Jet-Dri Multi Surface Rust Inhibiting Primer," Consolidated Chemical & Paint Manufacturing Company Inc., 456 Driggs Ave., Brooklyn, N.Y.*

IMMUNE: Work clothing made of a new coated asbestos cloth sheds molten metal as hot as 3,000° F. The cloth also resists acid, steam, water, and oil, and reflects 50 per cent of radiant heat. Greater tensile strength than ordinary cloth twice its weight and thickness is claimed. *"Thermogarb," American Optical Company, Southbridge, Mass.*

COMPACT SWITCH: A new toggle switch has four poles (three contact positions and a centered "off" position), yet occupies less than 1 cubic inch of space below the handle. The action is snug to prevent vibration or jarring from throwing the switch. It is recommended for use on compact control panels. *Electrosnap Corp., 4218 West Lake St., Chicago 24.*

-E.G.

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The Reviewing Stand

Putting the Facts in Focus

In this age of specialists, managerial warrants still favor the generalist. The need for the all-around top management man is most evident at the conference table, when the specialist comes out of his groove to present a point of view and contributes a segment to a complex financial, industrial, or distributive jigsaw puzzle. It takes the generalist to codify, unify, and make sense out of the whole picture and to act as an interpreter for scientists, economists, and marketeers, who speak an intellectualized pidgin English all their own.

The function of the generalist is often observed at the DUN'S REVIEW round tables, where ideas, opinions, and experiences are gathered for our Special Reports to Management on plant construction, transportation, office management, and related topics. DUN'S REVIEW has held more than twenty such conferences in the past six years at New York, Philadelphia, Chicago, Cleveland, Detroit, and St. Louis. At each of these meetings there has been a candid and effective exchange of information among the experts. All the participants (none more so than the DUN'S REVIEW editors) have come away with a richer storehouse of facts and ideas.

The findings from the latest of these conferences, dealing with plant location, design, and construction, have been assembled by Senior Editors Tom Kenny and Mel Mandell and will be presented in the March issue.

Obsolete Minds and Men

The early months of the year are periods of stocktaking and a good time for business men to review their intellectual as well as physical assets. This stocktaking applies especially to carefully nurtured assumptions that often become fixed opinions—the obsolete mental attitudes that can afflict management with a fatal nostalgia for "the good old days."

Edward A. McCreary, in the March issue of DUN'S REVIEW, moves a step beyond the personal problem of obsolescence in thinking to the more difficult task of getting rid of the executive deadwood that hangs on and limits the bearing quality and quantity of the corporate tree. He offers some useful ideas, based on the experience of leading concerns, for pruning the deadwood with a humane touch.

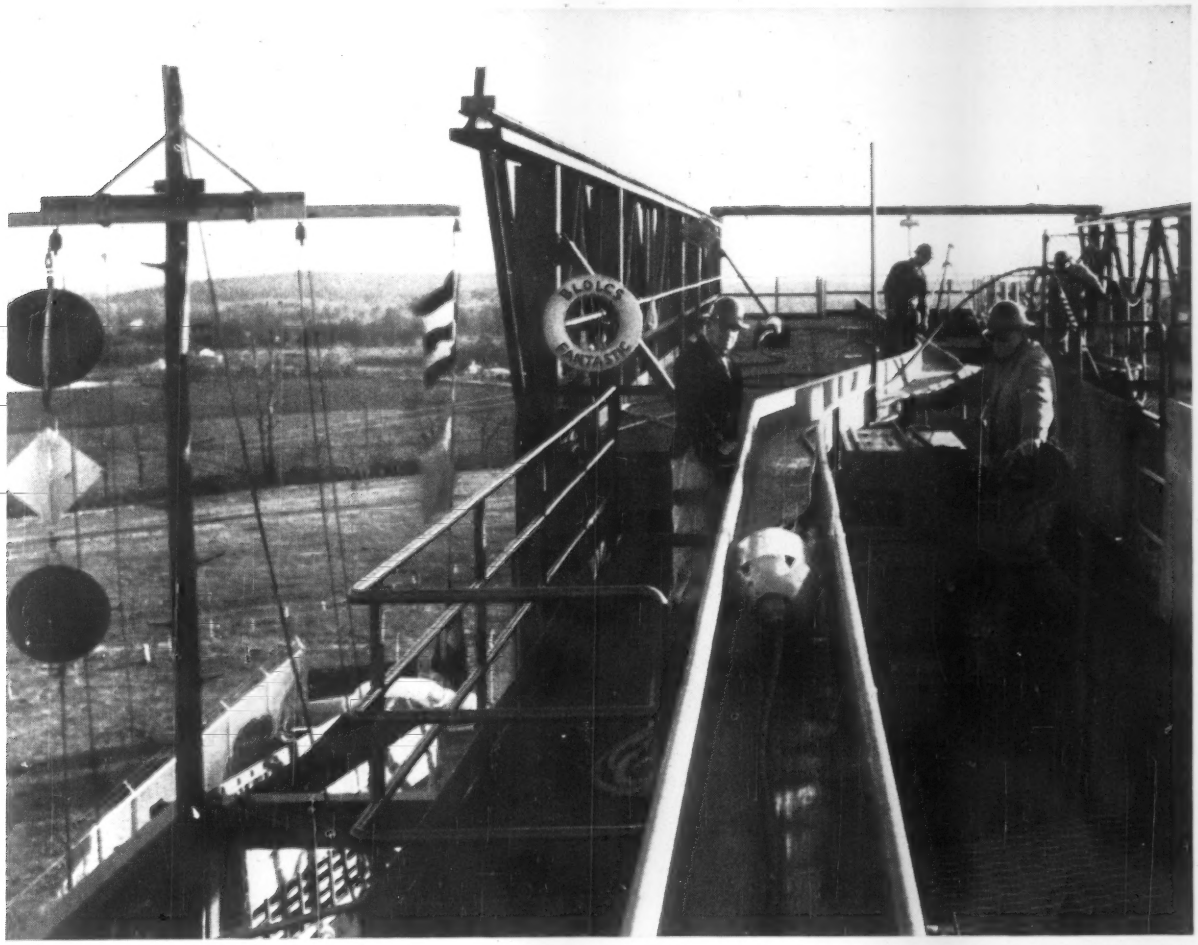
Don't Turn Off Your Mind

One of the popular delusions of students of human behavior is that an executive can close his mind to the affairs of the office the moment he closes his desk. It is equally foolish to believe he can board the 7:22 commuters' special and leave his family problems behind with his wife in the station wagon. No man can walk away, run away, or hide from a problem.

Many an office riddle has been solved on a Sunday walk or during a weeding chore in the garden, when the wheels of the mind are idling and a fresh idea suddenly pops into being.

Every man is entitled to an opportunity to commune with nature in the garden, with Plato in an ivory tower, or with his private thoughts during a game of solitaire in the club car. But often the most difficult decisions are made when the problem momentarily intrudes on these quiet moments. The oft-told tale of how Archimedes discovered the law of displacement while in a bathtub becomes the analogy of the accidental discovery of a key with which to unlock the door to business progress. The muscles of the mind like hard work, but they function best with a variety of challenge in time and place.

—A.M.S.



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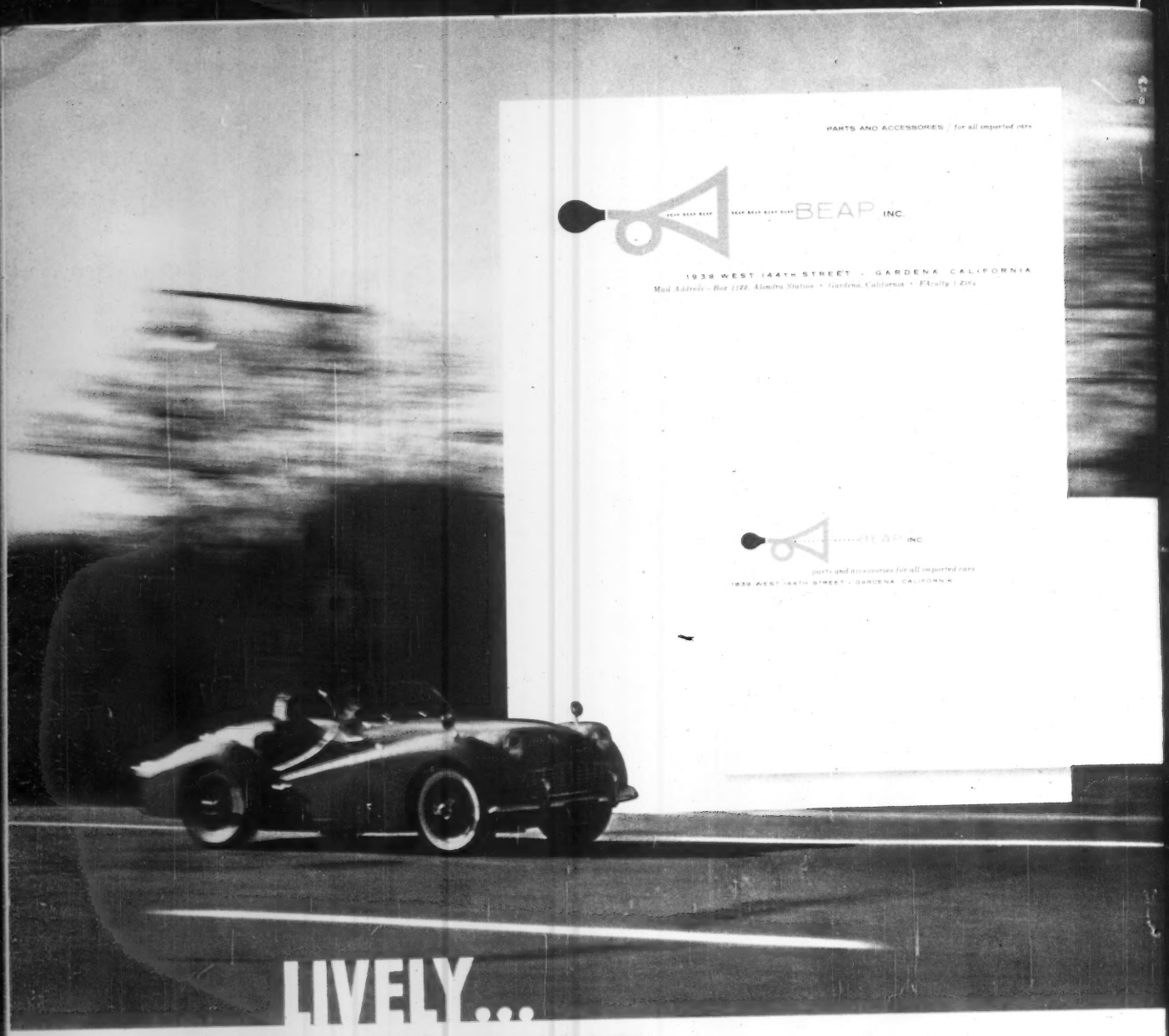
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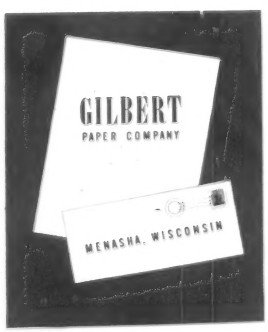

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